

FLORIDA HIGHWAYS

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Governor Doyle E. Carlton

IT IS time to consider a program of beautification of our highways. Rights of way should be secured with reference, not only to present, but future traffic and beautification as well. Florida makes its bid to the visitor. The roadside is the traveler's front yard and largely reflects the character of a people.

—Governor's Message to the 1929 Legislature.

September, 1929

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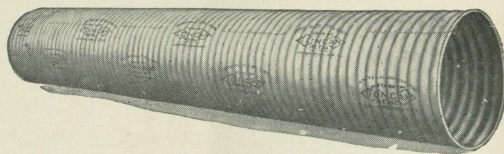
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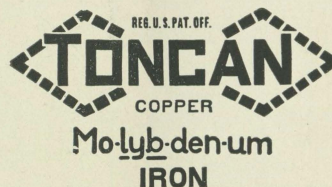


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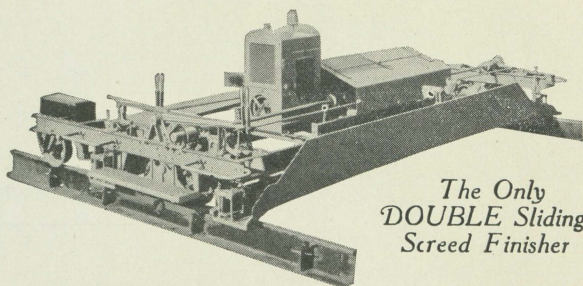
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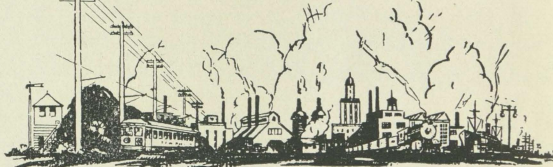
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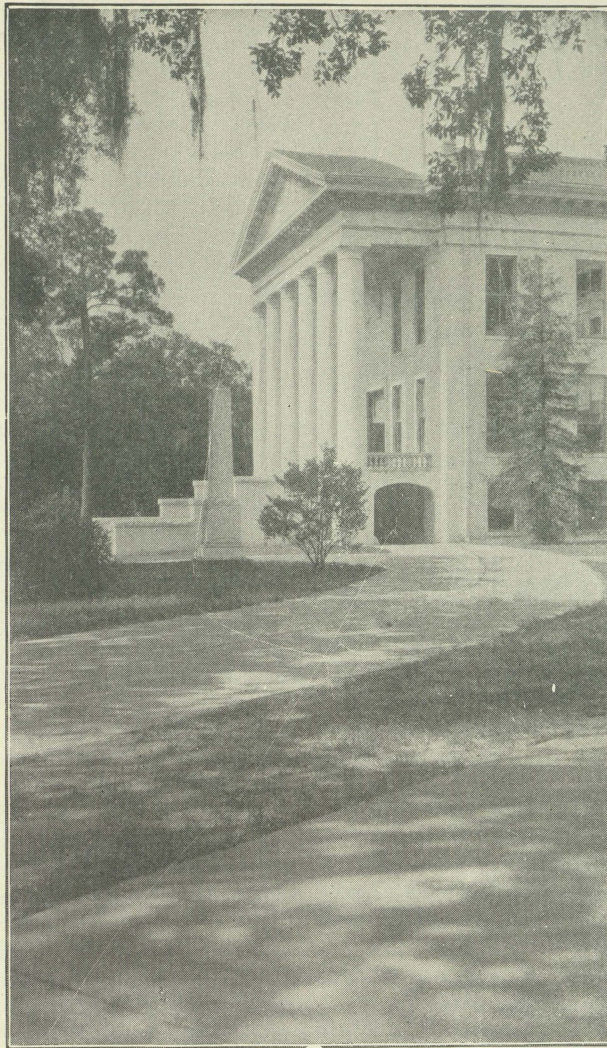


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FLORIDA

Vol. VI
No. 9



HIGHWAYS

SEPTEMBER
1929

The Road System of Florida

WE ARE presenting herewith a list of the roads in the State System as designated by the Legislature of Florida, which list shows revisions which were made by the 1929 Legislature; that is to say, the addition of new roads, and the change of certain roads as to status.

The designations given in the list as "first system," "second system" and "third system" indicate the status of the road or portion of road affected as to its place in the Department's program of construction as fixed by legislative enactment.

This list has been prepared to conform to the mandates given by the Legislature in 1929, and will be presented to the Department for formal ratification and adoption at the October quarterly meeting.

STATE ROAD SYSTEM

Road No. 1—First System.—Extending from the Alabama state line at Nunez Ferry to Jacksonville,

passing through Pensacola, Milton, Crestview, DeFuniak Springs, Bonifay, Chipley, Marianna, Chattahoochee, Quincy, by or near Havana, Tallahassee, Monticello, Greenville, Madison, Live Oak, Lake City, Sanderson, Macclenny and Baldwin.

Road No. 2—First System.—Extending from the Georgia state line north of Jennings to Fort Myers, via Jasper, White Springs, Lake City, High Springs, Gainesville, Ocala, Leesburg, Lisbon, Grand Island, Eustis, Mt. Dora, Plymouth, Apopka, Orlando, Kissimmee, Haines City, Bartow, Arcadia, and Olga Bridge; also from Leesburg to Lakeland, via Mascotte, Groveland, Buck Hill, Polk City, Foxtown to Lakeland; also from Silver Lake Forks, about four miles east of Leesburg, Lake county, via Tavares, to Mt. Dora, to be built with county funds and with Federal aid.

Road No. 3—First System.—Extending from the Georgia state line at a point on the St. Mary's river

known as Wild's Landing, to Orlando, via Jacksonville, Orange Park, Green Cove Springs, Palatka, East Palatka, Crescent City, DeLand and Sanford.

Road No. 4—First System.—Extending from the Georgia state line south of Folkston to Miami, via Hillard, Callahan, Jacksonville, St. Augustine, Bunnell, Daytona, Titusville, Fort Pierce, West Palm Beach and Fort Lauderdale.

Road No. 5—First System.—Extending from High Springs to Fort Myers, via Newberry, Archer, Williston, Dunnellon, Inverness, Brooksville, Lutz, Tampa, Riverview, Bradenton, Sarasota, Venice and Punta Gorda.

Road No. 5-A—Second System.—Is the extension from High Springs to Perry, via Fort White, Branford and Mayo.

Road No. 6—(Alabama state line to Marianna, First System).—Extending from the Alabama state line south of Dothan to Port St. Joe, via Campbellton, Marianna, Altha, Blountstown, Scott's Ferry and Wewahatchka.

Road No. 7—First System.—From Pensacola to Alabama state line at Flomaton.

Road No. 8—First System.—Extending from Haines City to Fort Pierce, via Lake Wales, Frostproof, Avon Park, Sebring, DeSoto City, Lake Annie and Okeechobee City.

Road No. 9—(Georgia state line to Madison, First System).—Extending from the Georgia state line south of Quitman, via Madison to a point on Road No. 35, near Shady Grove.

Road No. 10—First System, Georgia State line to Tallahassee; Second System, Tallahassee to Milton.—Extending from the Georgia state line near Beachton to Pensacola, via Tallahassee, Woodville, Newport, and as near St. Marks as practicable, and thence around the coast to Panacea Springs, St. Teresa, Lanark, also via Wakulla, Crawfordville, Sopchoppy, Carrabelle, Apalachicola, Port St. Joe, Panama City, Bruce, Freeport, Portland, New Valparaiso, Camp Walton, and thence into State Road No. 1 at or near Milton, and thence over State Road No. 1, connecting with Pensacola.

Road No. 11—Second System.—Extending from a point on the Georgia state line south of Thomasville via Monticello to Capps.

Road No. 12—Third System.—Extending from the Georgia state line on the Bainbridge and Quincy road, via Greensboro, Bristol and to East Point.

Road No. 13—Second System (Baldwin to Gainesville, First System).—Extending from Cedar Key to Yulee in Nassau county, via Bronson, Gainesville, Starke, Baldwin and Callahan; extending in an easterly direction from Yulee through Fernandina to the Atlantic ocean, over and along that certain twelve-mile stretch of new concrete road just completed by Nassau county.

Road No. 14—(Gainesville to Palatka, First System).—Extending from a point on Road No. 19, at the Suwannee River bridge, near Old Town, to Hastings, on Road 4, via Trenton, Newberry, Gainesville and Palatka.

Road No. 15—Second System.—Extending from a point on Road No. 10, at or near Newport, thence southerly along the Gulf as near as practical, to St. Petersburg, via or as near as practical to the mouths of the Steinhatchee and Suwannee rivers, Cedar Key, and as near as practical to the mouth of the Crystal

River, Homosassa, Weekiwachee rivers, Aripeka, Hudson, New Port Richey, Tarpon Springs, Clearwater and Largo, and also from Brooksville to Aripeka, via Spring Hill.

Road No. 16.—Extending from Ocala to Road No. 5, via Dunnellon, thence to Crystal river.

Road No. 17—(Tampa to Kissimmee, First System).—Extending from Haines City to Clearwater, via Lakeland, Plant City, Tampa and Oldsmar; also from Haines City eastward to a point intersecting Road No. 24 at Deer Park, in Osceola county.

Road No. 18.—Extending from Sarasota to Lake Annie, via Arcadia; and Road No. 18-A, extending from a point on Road No. 5, near Bradenton, via Oneco, intersection Road No. 18 at a point about thirty miles east of Sarasota.

Road No. 19—First System (Third System, Youngstown-Tallahassee).—Tallahassee-Ocala. Beginning at a point on Road No. 20 at or near Youngstown, thence via Blountstown, Bristol, Jackson Bluff, Tallahassee; leaving Tallahassee on the St. Augustine road, thence to or near Chaires, thence to Waukeenah, Capps, Lamont, Perry, Cross City, Old Town, Chiefland, Bronson, Williston, Ocala, Astor, Barbourville and to the intersection of Volusia Avenue and Road No. 4 in Daytona Beach.

Road No. 20—Second System.—Extending from Cottondale to Panama City, via Round Lake, and from Cottondale north to connect with Road No. 6.

Road No. 21—First System (Daytona to DeLand).—Extending from Daytona Beach to DeLand, thence from DeLand to Eustis, via Crow's Bluff and Cassia.

Road No. 22.—Extending from Orlando to Indian River City, via Ft. Christmas; also from Orlando to Crystal River, via Winter Garden, Clermont, Mascotte, Groveland, Bushnell and Inverness.

Road No. 23—Third System in Hernando County.—Extending from Ocala to Palmetto via Bushnell, at or near Rerdel or Terrell, thence in a southerly direction west of the S. A. L. railway tracks to the northern boundary of Pasco county, thence to Dade City and Plant City; also from Bushnell to Lakeland, via Webster, Tarrytown and making connection with State Road No. 17 at or near as practical the center of the SE $\frac{1}{4}$ of Sec. 14, Twp. 28, R. 23.

Road No. 24—First System.—Extending from Kissimmee to Melbourne, via St. Cloud.

Road No. 25.—Extending from Olga bridge to West Palm Beach and thence easterly along line between Twp. 43-44 to State Road No. 140 in Palm Beach county.

Road No. 26.—Extending from Clewiston to a point on Road 25 where it intersects the North New River canal, thence in a southeasterly course following the said North New River canal and the New river to Fort Lauderdale, also from Miami along the Miami canal to a point approximately south of where the North New River canal turns in an easterly direction, thence by two branches or arms, the one northerly to a point where the same intersects road along North New River canal and the other along the general course of the Miami canal to a point where same intersects Road No. 25.

Road No. 27—First System.—Extending from Fort Myers to Miami.

Road No. 28—Second System, Lake City to Bunnell (First System, San Mateo-Bunnell).—Extending from Lake City to Bunnell, via Palatka, Lulu, Lake Butler, Starke and Keystone Heights.



Project 40-A, Road 4, Brevard County.

Road No. 29.—Beginning at a point on State Road No. 24, near Holopaw and extending south via Kenansville, Okeechobee, thence around the western shores of Lake Okeechobee to Moore Haven, also from Okeechobee to Jupiter, via Sherman and Indiantown, connecting with Road No. 4.

Road No. 30.—Also from Frostproof to Vero, via Dougherty Crossing and Yeehaw.

Road No. 31.—Road from Ocala to Waldo, via Citra, Island Grove and Hawthorne.

Road No. 32.—From Bradenton to Avon Park by way of Parrish, Fort Green and Wauchula; also an extension from Avon Park, eastward through Highlands county, Florida, over what is known as the Kissimmee River road, a distance of approximately twenty miles and then in a northerly direction through the most practical route to a point where the same will intersect State Road No. 30.

Road No. 33.—Extending from the Alabama state line south of Florala via Laurel Hill to a point on Road No. 1 at or near Crestview.

Road No. 34.—Extending from Brooksville to Dade City via Spring Lake and Blanton.

Road No. 35.—(Third System, Greenville-Taylor County).—Extending from the Georgia line through Ashville and Greenville to a point on Road No. 19.

Road No. 36.—Extending from Leesburg to Inverness via Wildwood and Rutland.

Road No. 37.—Extending from Alabama state line at Dixonville via Allentown to State Road No. 1 at Milton.

Road No. 38.—Extending from Road No. 2 at Weirsdale, east to Umatilla in Lake county, by way of Stark's Ferry.

Road No. 39.—Third System.—Extending from the Alabama state line through Bonifay to Vernon and thence southerly to Phillips Inlet.

Road No. 40.—Extending from the Alabama state line, south of Florala, Alabama, to DeFuniak Springs, Florida, and thence southerly to Freeport, and to Choctawhatchee Bay on the west side of LaGrange Bayou.

Road No. 41.—From Milligan via Baker and Blackman to the Alabama state line.

Road No. 42.—Extending from a point on Road No. 1, north of Aucilla, through Aucilla to Lamont and to the Taylor county line, at or near Walker Springs.

Road No. 43.—Extending from a point on the Georgia line, southerly through Miccosukee to a point on Road No. 1 and over same easterly to a point north of Lloyd and thence south through Lloyd and Wacissa to the Gulf at or near the mouth of the Pinhook river.

Road No. 44.—Beginning at Mims and extending to Mt. Dora via Southmere, Geneva, Sanford and Sorrento.

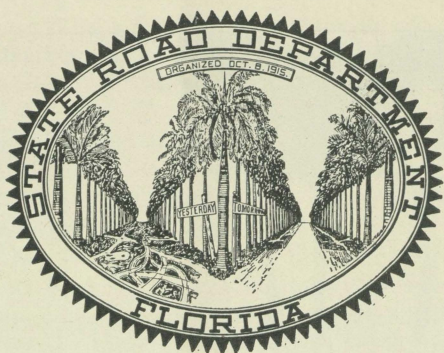
Road No. 45.—Extending from State Road No. 19, ten miles east of Ocala in a northeast direction to Bruce, thence to Salt Springs, Norwalk and Welaka in Putnam county, Florida.

Road No. 46.—Extending from the Alabama state line near Flomaton, Alabama, to Baker, Florida, via Jay, Berrydale and Munson.

Road No. 47.—Second System.—Commencing at a point on Road No. 4, south of Goodby's Lake in Duval county, running thence southerly as near as practicable along the St. Johns River to a point on Road No. 14, thence to East Palatka.

Road No. 47-A.—Palatka to Ocala via Rodman, Orange Springs and Citra.

Road No. 48.—Extending from St. Augustine to Starke, via Green Cove Springs; and also beginning at the intersection of State Roads Nos. 48 and 13



Florida Highways

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Volume VI September, 1929 Number 9

in the town of Starke, Bradford county, Florida, and extending to State Road No. 49 by way of the Stockade and through the State Farm.

Road No. 49.—Extending from the Georgia state line approximately north of Macclenny to Newberry via Macclenny, Manning, Sapp, Raiford, Lake Butler, Worthington Springs and Alachua.

Road No. 50.—Suwannee River Scenic Highway.—(Jasper to Live Oak, First System).—Extending from Branford to Jasper, via Live Oak, crossing the Suwannee river at Branford and extending in a southerly direction via Old Town to intersect with State Road No. 19.

Road No. 51.—Extending from Orlando to Brooksville via Groveland, Riverland and Spring Lake.

Road No. 52.—Third System.—Extending from the Alabama state line north of Graceville, through Graceville and to the Washington county line north of Chipley, thence through Chipley to bridge across North Bay near Southport and extending from Graceville via Jacobs to connect with Road No. 6.

Road No. 53.—Third System.—Extending from Camp Walton along Santa Rosa Sound as near there-to as practicable to Town Point.

Road No. 54.—Extending from Crestview by way of Valparaiso to Camp Walton on Road No. 10.

Road No. 55.—Third System.—Extending from a point at or near Pierson on Road No. 3 to Road No. 2 at Smithwick's Filling Station in Lake county, through Astor, Umatilla, Eustis, Tavares, Minneola and Clermont.

Road No. 56.—Extending from Ellisville to Lake Butler via Providence.

Road No. 57.—Extending from New Smyrna to Sanford.

Road No. 58.—Third System.—Extending from the Georgia state line near Darsey, connecting with Road No. 1 at or near Havana.

Road No. 59.—Commencing at Zolfo Springs, in Hardee county, to Crewsville, thence to a point at or near Fort Bassenger, crossing steel bridge over the Kissimmee river at this point, thence in the most advisable or acceptable route to Okeechobee City.

Road No. 60.—A road leaving the Alabama state line at a point where the Alabama State Highway System strikes the north line of Walton county, Florida, at or near Gaskin, thence to State Road No. 1, in DeFuniak Springs, Florida.

Road No. 61.—Extending from Polk City to Auburndale.

Road No. 62.—Third System.—Extending from Milligan on State Road No. 1, via Baker, Munson, Berrydale and Jay to a point on State Road No. 7 at or near the Alabama-Florida line.

Road No. 63.—Zolfo Springs to Bradenton via Oneco.

Road No. 64.—Extending from Largo to the Gandy Bridge via North St. Petersburg, in Pinellas county.

Road No. 65.—Extending from a point south of Gainesville on State Road No. 13, in a southwesterly direction to a point on State Road No. 5 at or near Williston.

Road No. 66.—Third System.—Beginning on State Road No. 15 at or near the Jefferson-Taylor county line to run in an easterly direction to connect with that certain Taylor county road from Perry to Hampton Springs towards the Jefferson county line.

Road No. 67.—Extending from State Road No. 8 at a point known as Lake Annie, thence to Venus,



Project 50, Road 14, Putnam County.

Palmdale, Boar Hammock, Main's Corner, Moore Haven, Liberty Point and Clewiston.

Road No. 68.—Beginning at Orange Park, Clay county, Florida, and extending through Middleburg, Keystone Heights, Hampton and Brooker to Worthington Springs.

Road No. 69.—Third System.—Beginning at State Road No. 1 in Live Oak in Suwannee county, thence extending in a southwesterly course through Suwannee county, Lafayette county and Taylor county to a point on the Gulf of Mexico at the mouth of the Steinhatchee river in Taylor county via Luraville, Mayo, Cook's Hammock and Clara.

Road No. 70.—Extending from State Road No. 23 in the city of Sumterville, at a point at the intersection of State Road No. 23 with range line dividing Ranges 22 and 23, thence running south along said range line dividing Ranges 22 and 23 in the City of Webster.

Road No. 71.—Extending from the east side of the Withlacoochee river at and near a point east of Croom, Florida, thence running eastwardly and northeastwardly to Coleman, Florida, by way of St. Catherine, Webster, Center Hill to Coleman, making intersection with State Road No. 23.

Road No. 72.—Third System.—Beginning at State Road No. 4, in the town of Bunnell, in Flagler county, Florida, and running in a northeastwardly direction along the present highway known as the Moody Boulevard to a point in the town of Flagler Beach where it intercepts a highway known as the Ocean Shore Boulevard, leading from St. Augustine, Florida, in a southerly direction to Daytona Beach, Florida.

Road No. 73.—Extending from Moncrief Corner to Dellwood via Bayview, in Pinellas county.

Road No. 74.—First System.—Extending from

Ocala, Marion county, in a southwesterly direction to Hernando in Citrus county, via Stoke's Ferry on the Withlacoochee river.

Road No. 75.—Extending from DeLand to New Smyrna, in Volusia county.

Road No. 76.—Third System.—Extending from Quincy, Gadsden county, by or near Midway, to Tallahassee, Leon county.

Road No. 77.—Third System.—Beginning at a point on State Road No. 5-A between Branford and the Itchtucknee river and proceeding southward across the Santa Fe river through the towns of Bell and Trenton to a point on State Road No. 19, at Chiefland, thence southward to State Road No. 13 at Sumner.

Road No. 78.—That concrete road thirty-two (32) feet wide, constructed by Duval county, from the city limits of South Jacksonville to the Atlantic ocean at Atlantic Beach, and the road continuing thence through Jacksonville Beach and to the northern limits of the City of St. Augustine, in St. Johns county, Florida.

Road No. 79.—Extending from Wewahitchka over the route now designated and followed by present Wewahitchka-Panama City county road.

Road No. 80.—(Keystone to Melrose, Third System).—To extend from State Highway No. 28 at Keystone Heights, to run thence southerly to Melrose, thence in a southwesterly direction between the lake and prairie to a point on State Highway No. 14 at or near McMeekin, Putnam county.

Road No. 81.—Beginning at Chiefland, and extending to Dunnellon, via Otter Creek, Gulf Hammock and Lebanon and Tidewater in the most direct and practicable route.

Road No. 82.—Extending from a point about one mile north of Lake City on State Road No. 2, running

through Columbia county to the Georgia line. Said road to follow as near as practical the present highway by way of Milton's store and Benton to Georgia line.

Road No. 83.—Extending from Trenton to Lake City via at or near Williford, Knight Bridge, Fort White and Columbia City.

Road No. 84.—Extending from Marianna, on west side of Chipola river, by way of Carr and Clarksville, to where the same intersects State Road No. 6 at Chipola Park, in Calhoun county. That the route to be followed by the said Road No. 84 shall be as near as practicable the same route of the present Marianna and Wewahitchka road to where the same intersects State Road No. 6.

Road No. 85.—Extending from Stuart to Indian-town, and thence to Okeechobee, said road to be known as the "Warfield Highway."

Road No. 86.—That the paved public highway from Arcadia, via Fort Ogden, DeSoto county, Florida, to Punta Gorda, Charlotte county, Florida, be and the same is hereby declared to be a State Highway and is hereby designated "The DeSoto Trail."

Road No. 87.—Beginning with the main highway leading south of Atmore, Alabama, and continuing in a southerly and southeasterly direction to Pensacola-Flomaton highway at some point between Pine Barren creek and Cottage Hill, said point to be determined by the State Road Department, all of said road in Escambia county.

Road No. 88.—Commencing on the state line dividing the State of Alabama and the State of Florida, due south of Stephen's Ferry on Pea river, in the State of Alabama, at the end of State Highway in the State of Alabama, crossing said river at said ferry, thence in a southeasterly direction, the nearest and most practicable route to an intersection of the section line dividing Sections 4 and 5, 8 and 9, 16 and 17, 20 and 21, 28 and 29, 32 and 33, Township 5 North, Range 17 West, and Sections 4 and 5, 8 and 9, 16 and 17, 20 and 21, 28 and 29, 32 and 33, Township 4 North, Range 17 West; and Section 4 and 5, 8 and 9, 16 and 17, Township 3 North, Range 17 West; point of intersection of said highway with said described section line or lines to be determined by the State Road Department, which from said determined point on said section line, or lines, thence south along said described section line, due south as nearly as practicable to the Town of Ponce de Leon, thence south to the county line dividing Holmes county and Walton county, thence in a southerly direction to the Lower Bridge on Bruce creek, thence in a southerly direction to State Road No. 10, at or near Bruce, following the present public road as nearly as practicable; which road shall be located by the State Road Department as other State roads are located.

Road No. 89.—Extending from State Road No. 44, as now designated and established at the point where said State Road No. 44 crosses the St. Johns river, running thence due westerly as near as practicable to a point on State Road No. 4.

Road No. 90.—Third System.—Beginning at a point on State Road No. 1 in Jackson county, not more than one-half mile east of new bridge over Chipola river, and extending to Greenwood and to within one-fourth mile of Bascom and to Dudley and to Neal's Landing on the Chattahoochee river in the most direct and practical route.

Road No. 91.—Extending from Ocala to Lake Weir, connecting with State Road No. 2, via Candler and Ocklawaha.

Road No. 92.—Third System.—Extending from a point on State Road No. 69 near Live Oak, thence extending on a westwardly course through Suwannee county and southwardly to a suitable point on Road 5-A in Lafayette county, said road to cross the Suwannee river at or near Dowling Park.

Road No. 93.—Extending from Pensacola along Gulf Beach Highway, in Escambia county, to the public road upon and into Inerarity Point, and thence along said Inerarity Point road to the shore line of Perdido bay at the proposed bridge site of the bridge over said Perdido bay.

Road No. 94.—Third System.—Extending from State Road No. 1 at Lake Jackson in a northerly direction, crossing the Ochlockonee river over the Whidden bridge and extending through the town of Concord to the Georgia line.

Road No. 95.—Beginning at a point on State Road No. 47, where said road crosses the township line dividing Townships Seven and Eight, run thence due west on said township line to the Gulf of Mexico. Said road shall be known as "St. Augustine State Road No. 95."

Road No. 96.—Beginning at a point on State Road No. 43, at or near the head of the Wascissa river, thence through Thomas City and Waukeenah to a point on State Road No. 11 at or near the intersection of the present Pinhook road with said State Road No. 11.

Road No. 97.—Beginning at Road No. 1 at Cypress and running in a southerly direction to Alliance and to Altha to connect with Road No. 6.

Road No. 98.—Beginning at Cottondale on Road No. 20 and running from there to Graceville.

Road No. 99.—Leading from Worthington Springs, in Union county, in a southeasterly direction through LaCrosse, to a point on State Road No. 2 in Alachua county, about one mile northwest of Paradise, Florida, which point is located in Section 18, Township 9 South, of Range 20 East.

Road No. 100.—Extending from State Road No. 21 at or near Crow's Bluff on the west side of the St. Johns river and extending westward via Altoona, intersecting State Road No. 38.

Road No. 101.—Extending from the town of Wakulla to the town of St. Marks, in Wakulla county.

Road No. 102.—Leading from the intersection of State Roads Forty-eight (48) and Thirteen (13) in Starke, Bradford county, Florida, to the Stockade at the State Farm, be, and the same is hereby declared and designated as a State Highway, same to be known as the State Farm Highway.

Road No. 103.—Leading from a point on Road No. 5 at or near Williston, in Levy county, through Old Wacahoota, Micanopy, Rochelle, Windsor to State Road No. 36 at Campville in Alachua county, thence over State Road No. 36 to Waldo, thence to Montecocha, thence to Lacrosse, thence to Alachua, thence west to Belle, in Gilchrist county, thence west to Wannee, in Gilchrist county, Florida.

Road No. 104.—Beginning at a point on the Pensacola-Flomaton highway near the Molino cross roads, in Escambia county, Florida, thence to the City of Molino, in Escambia county, thence in a southeast-



Project 679, Road 5, Hernando County.

erly direction to Milton, in Santa Rosa county, and there to connect with State Road No. 1.

Road No. 105.—Extending from the town of Baker, in Okaloosa county, to Galliver on Road No. 1, thence from Galliver to Holt, thence from Holt to intersection of State Road No. 10 at or near Camp Walton via Log Lake Bridge, in the most practicable route.

Road No. 106.—Begin on State Road No. 5-A about nine miles northwest of Mayo, Lafayette county, at or near where what is known as Madison-Mayo public road intersects said road No. 5-A, thence run northerly to or near where said Madison-Mayo road intersects the Madison-Lafayette county boundary line, thence run to Madison by the most feasible and practicable route, thence by way of Hanson and Pinetta to the Georgia state line where the Madison-Valdosta public road intersects the Georgia-Florida state line in Madison county near Horn's Bridge.

Road No. 107.—Extending from a point on State Road No. 1, about ten miles east of Tallahassee to Chaires, in the county of Leon and thence to Capitola, in said county, following as near as practical from Chaires to Capitola the present roadway and extending from Capitola, in the county of Leon, down through what is known as the El Destino Avenue of Oaks, in Jefferson county, to a point on Road No. 19 in Jefferson county, thence by way of Wacissa to the Taylor county line at or near Walker Springs, thence direct through Taylor county by way of Hampton Springs to Perry, thence south to a point on the Gulf of Mexico at or near the beach known as Adams Beach.

Road No. 108.—Extending from Poincianna, Monroe county, in a northeasterly direction to the Tamiami Trail.

Road No. 109.—Extending from Stuart to Indian-town and thence to Port Myacca, and to be known as "Gaines Highway."

Road No. 110.—Beginning about two miles south of Tallahassee on Road No. 10, at or near that branch of the Seaboard Air Line railway between Tallahassee and St. Marks, running thence via Ivan to Crawfordville, running thence along and as a part of State Road No. 10 to Medart in Wakulla county, and from Medart running thence in a southerly direction to Panacea Springs on the Gulf Coast in said county of Wakulla.

Road No. 111.—Extending from Stuart to Palm City and thence to Okeechobee, said road shall be known as the "Martin Highway."

Road No. 112.—Extending from Branford to Lake City.

Road No. 113.—Extending from State Road No. 13 about three miles south of Starke, to Gainesville, via Graham, Brooker and LaCrosse.

Road No. 114.—Extending from the town of Lawtey, in Bradford county, in a western direction to the State Farm road.

Road No. 115.—From a point on State Road No. 10, at or near Camp Walton, Florida, running in an easterly direction across the mouth of the Choctawhatchee peninsula, passing not more than two and one-quarter ($2\frac{1}{4}$) miles south of the town of Santa Rosa, and not more than one and one-quarter ($1\frac{1}{4}$) miles south of the town of Point Washington, Florida, thence in an easterly direction, joining with State Road No. 10 at some point between Panama City, Florida, and Choctawhatchee river.

Road No. 116.—Beginning on State Road No. 2, just west of Alapaha river and running in a westerly direction via Blue Springs and connecting with

State Road No. 1 just out of Madison, and to be known as "Blue Springs Highway."

Road No. 117.—Beginning at Indiantown and extending to West Palm Beach in the most direct and practicable route, substantially along the route of the Seaboard Air Line railway.

Road No. 118.—Extending from Astatula, on State Road No. 55, through Howey-in-the-Hills to Groveland, Lake county.

Road No. 119.—Extending from a point on State Road No. 22, two and a half miles west of Indian River City, northeasterly to the city of Titusville, thence to the Atlantic ocean by the most direct route.

Road No. 120.—Connecting with the Suwannee River Scenic Highway at Branford, thence northeast via Hickory Sink to Wellborn, connecting with State Road No. 1 in Suwannee county, thence north through Suwannee and Columbia counties to White Springs in Hamilton county, connecting with State Road No. 2.

Road No. 121.—Extending from a point on State Road No. 48, near north shore of Lake Kingsley, in Clay county, thence in a northwesterly direction to the town of Lawtey, in Bradford county, thence in a westerly direction to the Stockade of the State Farm in Union county, thence in a westerly direction to a point on State Road No. 49 at or near the town of Raiford, in Union county.

Road No. 122.—Connecting with State Road No. 1, in Live Oak, running northeast via Pine Grove, in Suwannee county, intersecting with State Road No. 120 at a point near White Springs in Hamilton county.

Road No. 123.—Extending from Campbellton, in Jackson county, to Graceville in Jackson county.

Road No. 124.—Road extending from the city of Lakeland, Polk county, to the city of Bartow, Polk county, via town of Highland City.

Road No. 125.—Extending from the intersection of the Lillian road with Nunez Ferry road at West Pensacola and thence in a westerly and southwesterly direction to the Lillian bridge over Perdido bay, via Millview.

Road No. 126.—Beginning at Neal's Landing, Florida, thence in a southerly direction to Sneads, Florida, and from thence to Shady Grove, Florida.

Road No. 127.—Beginning at State Road No. 10, at Sopchoppy, thence via Greenough, Sanborn and Smith Creek Postoffice, in Wakulla county, to the intersection with State Road No. 19, at Ward, in Leon county.

Road No. 128.—Extending from Wakulla Beach to the intersection of State Road No. 10, at or near the upper bridge across the Wakulla river.

Road No. 129.—Beginning at St. Marks at the southern terminus of the Seaboard Air Line Railway, thence via Crawfordville to Arran.

Road No. 130.—Beginning at Wacissa, thence via Fanlew, both in Jefferson county, to the intersection with the Gulf Coast Highway at Newport, in Wakulla county.

Road No. 131.—Leading from Hampton, in Bradford county, in a southerly direction on the hard-surfaced road leading from Waldo, in Alachua county, to Lake Santa Fe, at a point where the road to Orange Heights leads off at practically a right angle curve.

Road No. 132.—Extending from Monticello along

the route of the "Over the Lake" road to the Leon county line, via Herring's Store, and also to intersect with the Metcalfe road at the Georgia line.

Road No. 133.—Extending from Monticello along the route of the old Monticello-Aucilla road to State Road No. 1; and also along the route of the Ashville road to Ashville, and to intersect with State Road No. 35.

Road No. 134.—Beginning at Bunnell, in Flagler county, and running in a southwesterly direction along the present highway known as the Moody Boulevard to, or near, what is known as the Cody Store, thence turning in a southerly direction and continuing to a point on the line dividing the counties of Flagler and Volusia to intercept with what is known as the Perkins road, and thence continuing along the said Perkins road to DeLand.

Road No. 135.—Extending from Telogia to Sumatra, in Liberty county, to run parallel to the Apalachicola Northern Railroad.

Road No. 136.—Extending from Jackson Bluff to Carrabelle and Quincy road south, continue to due east of the town of Telogia, then straight to Telogia Station.

Road No. 137.—Beginning at White Springs and running in northerly direction along the Suwannee river north to the Georgia line in the most direct and practical route, be, and the same is hereby known as the "Woodpecker Route."

Road No. 138.—Known as the Lem Turner road, beginning at the corporate limits of the city of Jacksonville, in Duval county, and running thence in a general direction of the present Lem Turner road to a connection with State Road No. 4 at Callahan, in Nassau county.

Road No. 139.—Known as the Old Orange Park road, beginning at the corporate limits of the city of Jacksonville, in Duval county, and running thence in the general direction of the present right-of-way of the Old Orange Park road to a connection with State Road No. 3, Orange Park, in Clay county.

Road No. 140.—Road to be known as Atlantic Beach Boulevard, which shall extend from the city of St. Augustine, in the county of St. Johns, to the city of Miami, the county of Dade, running in a southerly direction across and through the counties of St. Johns, Flagler, Volusia, Brevard, Indian River, St. Lucie, Martin, Palm Beach, Broward and Dade.

Road No. 141.—Commencing at a point on Road No. 90, between Greenwood and Bascom, extending to Malone and to Alabama state line, in the most direct and practical route.

Road No. 142.—Commencing at a point on Road 67 at or near Mains Corner in Glades county, Florida, and extending west to LaBelle in Hendry county, Florida, via Citrus Center and Ortona in Glades county, along the most practical route.

Road No. 143.—Extending from Canal Point by way of Pahokee to intersect with State Road No. 25 at town of Belle Glade in Palm Beach county.

Road No. 144.—Extending from Milton on State Road No. 1, thence northwesterly via Chumuckla Springs to Bogia on State Road No. 7; thence westerly to an intersection with State Road No. 87.

Road No. 145.—Extending from Brighton in Highlands county south to the Indian Prairie canal in Glades county, thence in a southerly direction along

a most practicable route over or near the present graded road to State Road No. 29 at Lake Port in Glades county, Florida.

Road No. 146.—Third System.—Beginning at a point on State Road No. 28 at or near Keystone Heights, thence running north to Hampton, thence northwesterly from Hampton to intersect State Road No. 68 at or near the Leaston Wynn place, running via Hampton Beach, said road being otherwise known as Road No. 1 of Bradford county.

Road No. 147.—Extending from Raiford to Sanderson to intersect at a point three miles north of Bomanville with a road known as Road No. 154.

Road No. 148.—Extending from Olustee, being a southwesterly direction to Road No. 49 at Lake Butler.

Road No. 149.—Beginning at Deerfield, Broward county, and running westerly and southerly and entering Miami on N. W. 7th Avenue, locally known as West Dixie Highway.

Road No. 150.—Beginning at Campbellton, Florida, and running in an easterly direction through Sills and to connect with Road No. 90 at Malone in Jackson county, Florida.

Road No. 151.—Beginning at Seville in Volusia county, and running to Bunnell in Flagler county.

Road No. 152.—Beginning east of Lafayette creek on Road No. 10, Walton county, and running thence to and across the mouth of the Choctawhatchee river, thence by way of Point Washington in said county to the Gulf of Mexico.

Road No. 153.—Beginning at State Road No. 1 at or near Mossy Head in Walton county, Florida, running thence north across Shoal river at Turner's Bridge, thence in a northerly direction and intersecting State Road No. 40 at Gordon in said county.

Road No. 154.—Extending from Glen St. Mary's to Taylor, Florida.

Road No. 155.—Extending from Lawt Conner's farm in a northeasterly direction to Moniac Bridge via Baxter (Baker county), Florida.

Road No. 156.—Third System.—Beginning at a point on State Road No. 23, about two miles south of Zephyrhills in Pasco county and thence run southeasterly along the route of the A. C. L. railway to Thonotosassa in Hillsborough county.

Road No. 157.—Beginning from a point at or near Dinsmore in Duval county and running thence northerly and westerly through the counties of Nassau, Baker and Columbia to a point on the Florida-Georgia state line near St. George, where the same will connect with a Georgia state road from Valdosta through Fargo to the Florida line.

Road No. 158.—Extending from Lynn Haven Junction on Road 20, running in a northerly direction to Lynn Haven, thence to South Port across the North Bay bridge and thence to Chipley.

Road No. 159.—Beginning at Greenwood, thence to Two Egg, Dellwood, Grand Ridge and to connect with road now constructed at Calhoun-Jackson county line, thence along said road to connect with Road 6 at Blountstown.

Road No. 160.—Begin at a point on State Road No. 81, 230 feet southeasterly of Cow Creek in Levy county and extend in a southeasterly direction to a point 10 feet southerly of Station 1159 on State Road No. 15 as located by the survey of State Road No. 15 in Levy county by the State Road Department.

Road No. 161.—Extending from Bradenton via Manatee and Waterbury to the intersection of State

(Continued on page 10.)



Road 1, Jefferson County. Concrete.

Federal Aid for Secondary Roads

THE mud-spattered rural free delivery, halted for hours by flooded roads or mammoth snow drifts would soon be a thing of the past, according to the American Road Builders' Association, if a congressional appropriation could be secured for secondary roads in the United States.

Federal aid thus far has been confined entirely to primary roads, but the great majority of rural mail routes follow the county and township roads. Improvement of roads in these rural sections is advancing as rapidly as possible with the finances available.

There are 43,840 rural free delivery routes with a total length of 1,316,000 miles over which 43,724 carriers travel a total of 398,444,000 miles each year. The average length of routes is 30 miles, but they range as low as 6 miles and as high as 75 miles. A large majority of the carriers use motor transportation, which they operate on a government allowance of 4 cents per mile. The post office department spends \$15,000,000 annually for this mileage.

In addition, 11,879 star routes are maintained for the transportation of mail between way points. A considerable increase in the number of star routes the past year is attributed to suspension of service on railroad branch lines. The routes are operated privately and the mail contracts are given to the low bidders. Rural free delivery service also is given by 1,213 star routes. The appropriation for star route maintenance for 1930 is \$14,500,000. The cost of operation has increased from 11.99 cents per mile in 1928 to 12½ cents this year. Quite a contrast is offered between the 12½ cent cost of operating a star route and the 4 cents allowance for rural carriers.

Charles M. Upham, secretary-director and C. N. Conner, engineer-executive of the American Road Builders' Association, and Charles E. Grubb, president of the association's county officials' division,

will attend the National Rural Letter Carriers' Association convention in Savannah, Ga.

Grubb will offer the co-operation of the county officials' division to the rural carriers in their effort to better the roads upon which they travel and speed up mail delivery with a resultant reduction of the cost of maintaining equipment.

The great number of people to be benefited by construction of the secondary road systems will be pointed out by Upham, who declares that getting the rural mail carriers out of the mud will take the farmers out also, giving them an outlet to markets that will bring them prosperity and reduce food costs, make it possible for the extension of consolidated rural school systems, giving the farm youth like educational advantages with city children, and give city motorists a new outlet for tourist traffic, away from the crowded state highways.

A suggested federal aid law for secondary roads will be laid before the convention for its consideration. Among its provisions are the following:

Federal aid funds to be granted to counties which have an organization for administering and constructing highways.

The location, standards and specifications to be agreed upon by the county and state before federal aid is asked.

The work to be carried on through the state in much the same manner as federal aid state highways are now constructed.

The financing of county highways and state highways through federal aid to be kept separate.

The county to have a complete and acceptable plan before applying to the state for federal aid.

The proportionate share of the total expense for each secondary highway to be divided between county, state and federal government.

Federal aid in any instance to be not more than \$5,000 per mile, or such other agreed amount which further study might indicate as equitable.

The Road System of Florida

(Continued from page 9.)

Road No. 18-A near Verna, over the present constructed road.

Road No. 162.—The eastern terminus to be the intersection of Orange Ave. in the city of Fort Pierce with line 1½ miles south of the northern line of Twp. 35, or as near thereto as to be practical and economical to an intersection with State Road No. 29, thence as directly as possible, practical and economical, etc., etc., to the city of Sebring, securing a feasible and direct crossing of the Kissimmee river.

Road No. 163—Third System.—Commencing on State Road No. 1 at Grand Ridge, Jackson county, extending from said point in a southerly direction to Blountstown, Calhoun county, to connect with State Road No. 6.

Road No. 164—Third System.—Commencing at a point at or near Venus on Road No. 26 and extend south to the town of Everglades in Collier county, via Tasmania, LaBelle, Felda and Immokalee along the most practical route.

Reward of Genius

There was a story from the Middle West the other day about a poet who was washing dishes in a restaurant while awaiting the publication of a book of his poems. After it comes out, of course, he will probably be washing dishes in a restaurant.—Boston Herald.

Famine Expert

The office boy entered the sanctum of the small-town newspaper and said: "Say, boss, there's a tramp outside who says he hasn't had anything to eat for six days."

"Bring him in," said the editor. "If we can find out how he does it we can run this paper for another week."—Columbia Record.

Why Look for Trouble

Two friends were talking over a projected holiday on the Continent.

"I say," said one, "how do we ask for water in Paris?"

"'Avez vous'—" began the other, then broke off. "But shall we want any water in Paris?"—Birmingham Gazette.

Florida's Great Road System

Alumnus of University, Member of State Road Department, Urges Establishment of Research Board to Further Develop Resources of State

By W. A. SHANDS, in The Florida Alumnus

EDITOR'S NOTE—W. A. (Bill) Shands, 40, appointed a member of the State Road Department from the 2nd Congressional district on January 18 of this year, entered the University of Florida the year it was established in Gainesville, playing football on the first eleven the institution produced. In 1910 he resigned to enter the business field and two years later was married to Miss Catherine London Hawkins of Jacksonville. For twelve years Bill was principally interested in the lumber business, but in 1922 became associated in the Lyric Theatre and Gainesville Poster Advertising Co., selling out his interests in the theatre in 1925 to E. J. Sparks.

In 1928 Bill sold the Gainesville Poster Advertising Co. to Packer of Florida and was appointed General Manager for their Florida interests. He is a member of Kappa Alpha, Rotary, Elks and the Chamber of Commerce. Was a member of the City Council and City Commission for two years.

Back in 1908 Bill was playing manager of the 'Gators and he knows his football, past and present. The Alumnus is deeply indebted to this loyal son of Florida for his splendid contribution on the State Road Department, and joins with his wide host of friends in wishing him every success and happiness in his work for many years to come.

THE duties of the State Road Department are probably of greater proportion and therefore a greater responsibility than the average citizen has any idea. We are responsible for the expenditure of about \$12,000,000.00 per year. There are many things that must be considered other than the mere construction of highways. Probably the greatest problem to cope with is the item of maintenance. There is not any economy in building roads unless they are properly maintained. Therefore, it would appear that our maintenance budget must be increased each year and construction budget decreased.

The department has numerous requests from different counties and communities for the construction of roads in their respective districts. All of these requests are urgent but we must look at them differently than from a county standpoint. We must see what part they play in the state system as a whole, and build accordingly so as to serve the greatest amount of travel.

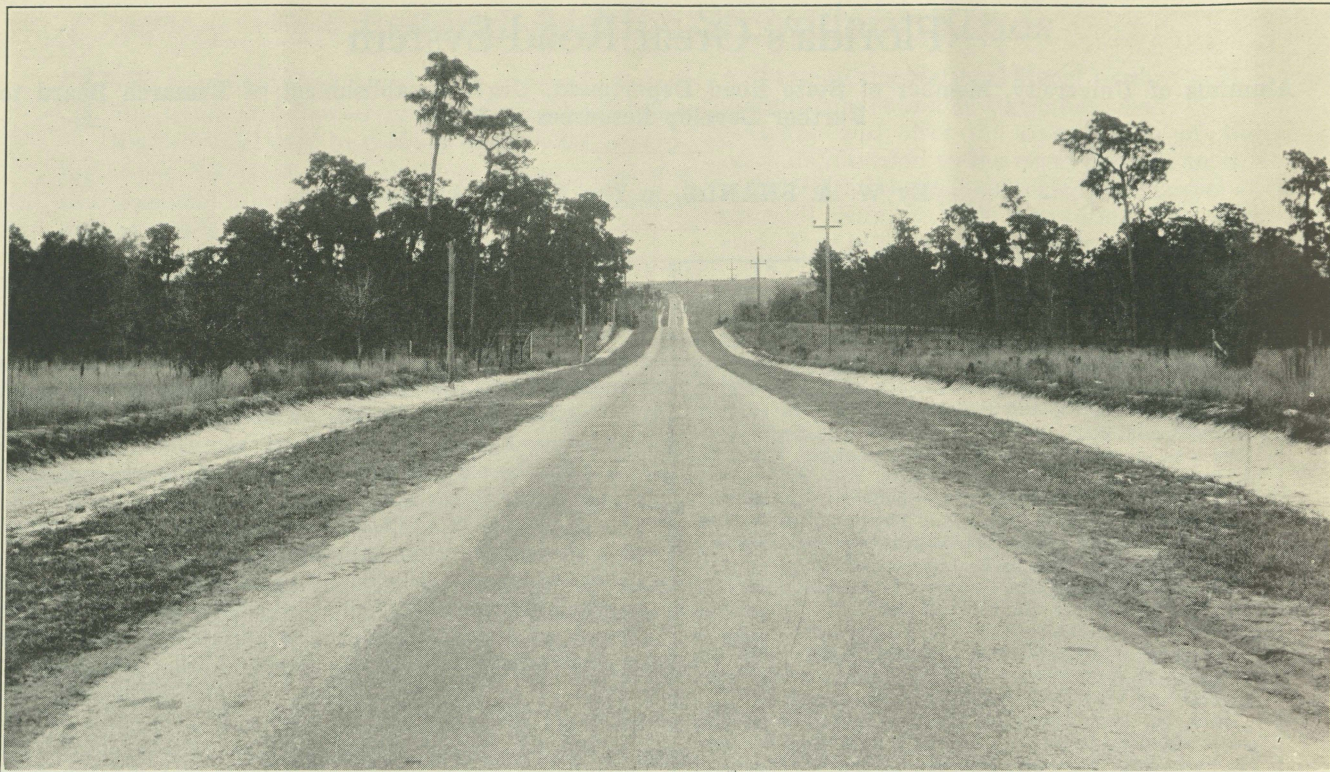
We now have 2,600 miles of hard surfaced road in the State which we are maintaining. We have about 500 miles of grade ready for surfacing and 200 miles to grade on this year's schedule. We hope to curtail grading for another year, until we can complete the grades in which we already have considerable money invested, so that they will serve some useful purpose to the traveling public.

Most of the roads we now build are rock base and surface treated. This is done for two reasons, the cost is not as great as a completed type road and then the traffic is not heavy enough to demand a heavier type. I believe that it is only a question of a short time before the traffic will be of sufficient volume that it will be necessary to go over the sur-

face treated roads and bring them up to the completed type.

The materials used in the construction of roads can materially affect the quality of the road and also encourage or discourage the development of Florida industries. I am convinced that Florida has sufficient good road material in all sections of the State that can be used so as to avoid shipping any material from other states with the exception of asphalt. The policy of the board is to always give Florida materials the preference. There are large investments in rock quarries and cement plants in the State that contribute to the support of the State; they have large numbers of employees and they should have encouragement from the State so as to be able to keep these plants in operation. The character of Florida materials vary to a large degree but with the assistance of our testing division and the engineers in charge, there is usually a way that we can take the particular material and develop a way to use it profitably. During the short time that I have been connected with the Road Department, it appears to me that we should look forward to the time that we will have a research department either with the Road Department or some other branch of the State government.

I believe that Florida has numerous undeveloped resources that can be developed into profitable industries, but this can only be determined through work carried on by a research department. The demand for road and building materials has been directly responsible for the development of some very large operations in the State. Notable among these are the Lime Rock plants in the State, and a number of plants that are producing a very fine quality of hard rock. The dredging of the harbor at Miami was the direct cause of a large industry for Miami. The officials of Miami made tests of the material from these operations and the result is that practically all buildings and streets in Miami are built with this material. In addition to Miami having an industry, she is also continuing to deepen the water in her harbor, which is another progressive step. Florida has some very fine deposits of Travertine that are very valuable. There is in operation now in the Manatee section a plant that is producing a very fine quality of Travertine. I do not know what was responsible for the development of this particular deposit but I do know of other deposits which have not been developed that were located by those searching for suitable road material. These are the things that would warrant the necessary funds for a research department. We should develop the State's resources as rapidly as possible so as to have diversified production. One can easily see that diversified production would eliminate such conditions as we now have which were caused by infestation of the Mediterranean fly. So long as we have production we will progress.



Road 2 near Wiersdale.

The Evolution of Road Location

Road Location and Relocation is Still Evolving, but We Are Making Progress, as This Thoughtful Article Points Out.

By **HARRY BYRON JAY**, Illinois Division of Highways, Kankakee, Illinois.

THERE has been an interesting development in the location of highways in the past fifteen years. The evolution of the country road from a leisurely trail detouring around trees and gullies—located originally, perhaps, by some meandering cow—to the present high speed route, is the logical result of the law of supply and demand.

In the early days our pavements followed the old earth road locations faithfully through every crook and turn. Right-angled corners were the rule. Zig-zag alignment caused us no worry. We were not disturbed by the inefficiency of going a mile east, a mile south, and a mile west to get back on the same general line. We still were horse-and-buggy minded, and did not object to taking a little longer for the trip. And besides, the roundabout route would give us a chance to stop and say hello to Bill Thompson over on the widow Lambert's place. Time was not so much an item then as now.

Relocation Need Began to be Felt

It was not long after the World War, however, that we began to see the error of our ways. Extra miles were found costly to build and maintain. With the large increase in the number of automobiles using the roads, we also began to realize the extra and unnecessary cost to the public of traveling a mile or two out of its way.

On a road having a traffic count of 5,000 motor vehicles per day—and there are many such roads—one mile of unnecessary distance traveled between two points means an estimated loss of \$500 per day to the traveling public; in one year, a loss of \$182,000. When we consider that there are scores of such instances, the loss amounts to millions each year. Too, this loss is likely to continue, for, once a high-type pavement is built, it generally is there for many years.

It then became the object of engineers to eliminate insofar as possible the loss caused by unnecessary miles; to locate their routes between two governing points by the most direct route. But reaching this objective has been a very gradual process.

At first the old roads were merely straightened out somewhat, and a curve put at the corner, instead of an angle turn. These curves could be traveled at a speed of 25 miles per hour. This was a good beginning, and engineers became more radical and courageous as the benefits were more thoroughly appreciated both by themselves and the public.

Soon new specifications required longer, easier curves, banked for high speed, making it safe to negotiate them at 40 miles per hour.

And instead of being content to follow the old earth road, the engineers began to take short cuts, acquiring new right-of-way, and leaving the old road

entirely where the route could be shortened or a railroad crossing could be avoided by so doing. Instead of going around a house near a village, they would move it out of the way. Instead of going through a village, they would avoid it entirely if possible.

An Early Experience

The reforms, however, have been accomplished with more or less travail. To illustrate: ten years ago, when I first entered the Illinois state highway department, one of the first duties to which I was assigned was the location of a cross-state trunk highway. My previous experience in location had all been acquired upon railway surveys. Naturally I put into practice the principles I had learned there when it came to the running of a line for a state highway.

The law stated that the road in question must serve two certain villages about ten miles apart. In approaching the first village it was decided merely to touch the edge of it. If I followed the old road, it would be necessary to put in two right-angle turns close together—a location dangerous in the extreme for heavy traffic—because of a house, worth about \$1,000, which stood upon the corner. Rather than make so dangerous a location, I ran my line through the house and recommended in my notes that the place be purchased and the house removed.

After passing through this village, we came to a corner where, for no reason at all, the old road turned and rambled off in a roundabout way towards the next village. By abandoning the old road and striking out across country, parallel and adjacent to a railroad track, I could save two miles of distance in getting to that next town. A saving, this would be, of around \$60,000 in original cost of pavement construction, and a saving of two miles of operating costs to hundreds of motorists per day. And perhaps we might also figure as a saving the interest on \$60,000 for an indefinite period, since that sum might be used for some other investment.

Fewer bridges and culverts would be required on the new location—an additional saving, for it was across level country, while the old road followed along the foot of hills where there were numerous ravines and gullies to cross.

I chose the short cut. When my notes were turned in at the district office, my superiors broke out in a cold sweat at my heretical ideas on location. I was severely criticized. My line would not do at all. That was not the way roads were located in this state. Since I would not back down and follow the time-honored custom of running a survey along the old cow trail, I was relieved of my command of the location party.

However, by the time the road was built, a few years later, the ideas of the state engineers had passed through several stages of evolution. The road was built on my original location. For by this time engineers, constantly studying what has become one of the greatest industries of the present day, were progressing, seeing farther and farther ahead. Always more and more they were aiming at a fast, safe and uninterrupted flow of traffic by the shortest distance between two points. Crooked alignment with no good reason, broken-back curves, or a poor grade line, today are a cause for professional shame to an engineer.

Local Opposition Based on Misunderstanding

A few years ago towns and villages fought hard to have the trunk lines go down their main streets, figuring, perhaps, that Zeke's place would sell a few more sodas and cigars if it did. Many cases were taken into the courts. Some towns were successful in the courts; some were not. But, almost without exception, I believe, those which were would be glad now if the road ran at the edge of the town instead of through it. They have found that with the advent of the highway, traffic has increased tremendously, almost incredibly. Citizens are inconvenienced in the pursuit of their daily duties. Their cross streets are blocked. The roar and vibrations of heavy trucks day and night get on their nerves. Lives are endangered by the mass of through traffic. And they find that the new business brought to their town is negligible; that with the highway at the edge of the town, merchants realize quite as much profit. For if a motorist has errands in the town, needing gas or repairs or refreshments, he has no objection to driving a few blocks off the highway to get them.

Where the highway skirts the village, the benefits are equally obvious to through traffic. There are no interferences by local traffic, no stop signs, no crawling along at a snail's pace while a local car backs away from the curb into the traffic lane.

There are still plenty of villages which have not profited by the mistakes of their neighbors and which hold up highway construction, fighting to have a trunk line run down their main street. But they are gradually learning, and it is only a matter of time until they all will understand and keep pace with the engineers in their development of the modern trunk highway. For the villager who fights today to bring the world to his Main Street, tomorrow finds himself out seeing the world, traveling coast-to-coast thoroughfares. And he learns to appreciate uninterrupted right-of-way.

What of the Future?

It is a long way to perfection in this business of serving efficiently the ever-increasing volume of traffic. But when we see what already has been done, how we have come up from the narrow, crooked, meandering road to the present wide and fairly safe highway, we have hopes of still better things. For high-speed roads must be built if the automobile is to compete and stay in the running with the airplane.—The Highway Magazine.

HIGHWAY BRIEFS

Delaware—The legislature has passed a new motor vehicle act closely approximating what is known as the Hoover Code. The maximum truck and bus load was increased from 22,000 to 24,000 pounds for pneumatic tires, and a gross load of 36,000 pounds established for six-wheel vehicles.

Pennsylvania—There are 385 highway patrolmen in Pennsylvania, all mounted on motorcycles. They are the Good Samaritans to good, but unfortunate motor drivers, but they are hard-boiled minions of the law with speed demons and drunk motorists. Pennsylvania also maintains a state police force.

Motor Vehicle Accidents

AN AVERAGE of more than three deaths in the United States every hour of every day in July was caused by motor vehicle accidents. This in the face of the myriad safety factors that are built into and that surround the modern highway and city street.

Cities, states, railroad companies and automobile manufacturers now spend millions of dollars annually to protect and preserve all citizens who participate in present day vehicle and pedestrian traffic. Yet motor vehicle deaths in July exceeded those in June, and the total deaths to date in 1929 show an increase of 6 per cent as compared with similar period of last year.

The first seven months of 1929 saw an estimated total of 15,900 persons meet death on America's highways and city streets. This number is only a small portion of the great army of victims who were not killed, but of whom many were maimed for life, many never will walk again, some will never see, each of them a personal tragedy and an economic loss to the nation.

Representative states report about 35 serious non-fatal accidents to each fatality. On that basis, more than one-half million persons can be estimated as the toll of serious injuries in traffic thus far in 1929. Based on the studies of costs of motor vehicle accidents made by the statistics committee of the National Conference on Street and Highway Safety, a conservative figure of the cost of highway accidents for this year will reach above one billion dollars.

Stirred to action by the ever-soaring figures on traffic deaths, the traffic committee of the American Road Builders' Association is sponsoring its third annual highway safety campaign.

A survey is being made with a view to ascertaining what remedies might be most effective in halting this fearful loss of human lives.

It has been found, according to the Association, that proper measures for safety are going into the building of highways and of vehicles to operate over them, and that the greater blame, as in all previous investigations, must be laid at the door of the reckless driver and the unwary pedestrian.

Consulting the National Safety Council figures for July, it is found that pedestrian deaths continue to lead the list of traffic fatalities, taking 54 per cent of the total number. Thirty-seven per cent of these pedestrians killed were children under 15 years of age.

The American Road Builders' Association believes in furthering and increasing the education of children along highway safety lines. It is heartily in favor of school lessons, drills and plays on the subject, of school boy patrols and of all other methods that will instill caution into youthful minds.

Not the sort of education that will break down youthful spirits by thoughts of constant danger, but the development of ingrained caution, such as that which keeps a child away from a red-hot stove.

As for adults, drivers and pedestrians, the Association believes that they can be taught highway safety most effectively by practical, uniform laws that apply to all moving traffic, whether pedestrian or vehicular, and their rigid and impartial enforcement.

Pedestrians should obey traffic laws to make

streets and highways safe for themselves and for drivers. There can be no safety where one group of traffic moves under strict regulation with traffic lights and police direction, while at the same time in the same area another group moves as it pleases, with no regulation at all.

There were 90 less motor vehicle fatalities in Chicago during the first six months of 1929 than during the corresponding period of 1928. There were 4,000 arrests for speeding, reckless driving and running through stop lights for the first six months of 1928, and 10,000 such arrests during the first six months of 1929.

Chicago's experience is evidence that strict traffic law enforcement pays well in human dividends. These additional 6,000 arrests probably had much to do with the saving of 90 lives.

Traffic laws, however, must of necessity be practical and of a nature to speed traffic movement, rather than slow it down. No amount of safety devices or safety education will change the habitually reckless driver or pedestrian. It requires laws and their enforcement.

SUPREME COURT TO DECIDE WHETHER GAS TAX IS TOLL

The question of whether a state gasoline tax is a toll within the meaning of the Federal aid highway act, which prohibits the expenditure of Federal funds on toll roads, is now before the Supreme Court of the United States, according to the American Automobile Association.

The national motoring body says that all motor-dom is watching the case with interest as the opinion is of great importance to all concerned. The statement continues:

"This case is that of *Williams vs. Riley*, which involves the constitutionality of the gasoline tax statutes of California. The question at issue is whether the charges thereby imposed are tolls within the meaning of the Federal aid act of 1916 and the Federal highway act of 1921 which prevented the expenditure of Federal moneys upon toll roads.

"In this case the petitioners seek to enjoin the State from disbursing collections under gasoline tax acts which aggregate approximately \$33,000,000 a year. Although the questions have been raised in and passed by District Courts of the United States in Oregon, Washington and Idaho, the questions are presented to the Supreme Court of the United States for the first time in the *Williams* case.

"The position of the petitioners is that the charges under the state laws are in effect tolls upon the consumers of motor vehicle fuel of those who are operating motor vehicles upon the public highways, while the state contends that the tax is an excise for the distributor for the privilege of engaging in the business of selling gasoline to those using it for motor vehicles operating over the public highway. Assuming that in some aspects the charge may be regarded as an indirect imposition upon the consumer, the state maintains that the tax is not a toll within the contemplation of Congress and that this is indicated by the acquiescence of the Federal government in the enforcement of gasoline tax statutes and other motor vehicle legislation in practically all of the states during a period when the Federal government has been distributing Federal aid moneys."



Road 1, Jackson County. Surface Treated Sand Clay Base.

County Road Building Stimulated by Federal Aid

Surface Construction Already Covers Approximately 600,000 Miles.

THE stimulating effect of Federal aid upon road building generally has reached far beyond the main routes upon which the states and the Federal government are now at work jointly. This statement is made in a progress bulletin just issued by the American Highway Educational Bureau, based upon construction advices from the field.

"In understandable terms of mileage," the bulletin proceeds, "surface construction on local roads under the direction of county and township authorities has reached approximately 600,000 miles, or slightly less than one-fifth of the total road mileage in the country. In addition to this, almost another million miles of local roads have been graded and drained ready for construction.

"This gain in the county and township field shows how the two construction areas are steadily coming together, the one working in from the county under local administration, and the other working out from between population centers under state and Federal direction. It presents a clear picture of the processes by which the public is coming into the ownership of a comprehensive and well co-ordinated system of improved highways, and it also shows that the Federal aid plan has gone far enough in practice to prove its worth as a safe channel through which to apply increased Federal aid in order that state and interstate roads may be rushed to completion more speedily.

"That all is going fairly well on the county and township end of the job, considering the light traffic which this division is called upon to bear, is indicated by the fact that more than \$750,000,000 is now

being applied annually to local road improvement, or approximately \$670,000,000 more than is being spent by the Federal government as its share of construction costs on the main traffic routes. It should be remembered that these latter routes carry between seventy and eighty per cent of the nation's highway tonnage."

Upon the point that motor car registration is increasing faster than roads are being built, the bulletin warns that "unless engineers are allowed to proceed with due care and in orderly fashion, mile by mile and upon the main routes first, there will come a scrapping of existing roads under excessive wear that will appall the taxpayer. He will then be in the position of the frog in the well climbing up one foot and falling back two, and the taxpayer's only insurance against such a discouraging situation rests in following out the present Federal aid program, even to the extent of increased appropriations."

Fair Enough!

Says Abie: "Cohen, I've been to the bank to borrow some money, and they say all I need is that you should sign to this note your name. Then I can have all the money I need. Ain't that fine?"

"Abie," says Cohen reproachfully, "you and I have been friends for many years, and yet you go to the bank when you need money. Abie, you just go again to the bank and say that they should sign the note, and then Cohen will lend you the money!"

Tit—"In a battle of tongues any woman can hold her own."

Tat—"Yeah. But she never does."—Life.

Gasoline Consumed in Kentucky and in All the States for Comparative Periods

Kentucky			Tax Per	Jan., 1929	Jan., 1928
	Gallons	Tax	Gallon Cents	Gallons	Gallons
1928					
April	10,448,816	\$ 522,603.28			
May	11,947,290	597,615.15	Washington	2 14,422,000	12,189,000
June	11,709,500	585,607.51	Wisconsin	2 15,659,000	17,405,000
July	13,339,282	667,363.72	Wyoming	3 1,612,000	1,533,000
	47,444,888	\$2,373,189.66	Total	528,112,000	471,917,000
1929		Tax	Daily Average	17,036,000	15,223,000
April	12,538,659	\$ 626,943.82	Increase over previous year—		
May	13,975,458	699,286.25	Amount		56,195,000
June	13,823,761 (Deduction \$31.62)	691,156.70	Percentage		11.9%
July	15,400,000 (Estimated)	770,000.00	—Kentucky Highways.		
	55,737,878	\$2,787,386.77			

Gasoline Demand by States

Gasoline consumption in thirty-seven states for January, 1929, as indicated by reports made by wholesalers and dealers in the various states under provisions of the gasoline tax laws or gasoline inspections laws, totaled 528,112,000 gallons, an increase of 11.9 per cent over January, 1928. This is considered a rather remarkable showing, in view of the exceptionally unfavorable weather prevailing in many states in January.

Following are the figures showing the tax rate and consumption in January of both years:

	Tax Per	Jan., 1929	Jan., 1928
	Gallon Cents	Gallons	Gallons
Alabama	4	12,398,000	11,723,000
Arizona	4	4,695,000	3,665,000
Arkansas	5	10,706,000	9,249,000
Colorado	3	9,856,000	9,002,000
Delaware	3	1,919,000	1,567,000
Florida	5	20,522,000	20,732,000
Georgia	4	15,705,000	14,903,000
Idaho	4	2,214,000	2,071,000
Indiana	3	23,740,000	23,065,000
Iowa	3	20,420,000	20,122,000
Kansas	2	19,990,000	19,240,000
Kentucky	5	8,927,000	7,564,000
Louisiana	4	12,074,000	12,496,000
Maine	4	3,038,000	2,409,000
Michigan	3	42,827,000	29,175,000
Minnesota	2	18,969,000	14,504,000
Nebraska	2	15,135,000	13,861,000
Nevada	4	941,000	718,000
New Hampshire	4	2,239,000	1,642,000
New Jersey	2	28,316,000	28,550,000
New Mexico	5	2,814,000	2,354,000
North Carolina	4	22,682,000	20,656,000
North Dakota	2	4,908,000	2,522,000
Ohio	3	56,494,000	49,867,000
Oklahoma	3	22,559,000	19,461,000
Oregon	3	8,894,000	7,225,000
Rhode Island	2	4,334,000	3,861,000
South Carolina	5	8,251,000	9,055,000
South Dakota	4	6,487,000	4,898,000
Tennessee	3	13,187,000	10,531,000
Texas	2	53,994,000	48,951,000
Utah	3½	3,110,000	2,783,000
Vermont	3	1,618,000	1,185,000
Virginia	5	12,456,000	11,183,000

BEAUTIFYING HIGHWAYS

Saginaw (Mich.) Daily News

There has been much discussion in recent years of steps to beautify tourist highways, but to the casual observer it has been mostly all discussion with little real effort to put plans and theories into effect. Most states have been so occupied in catching up with their quotas of improved highways that about all they have found time to do is to lay a pavement, border it with a ditch, level off the shoulders and let it go at that.

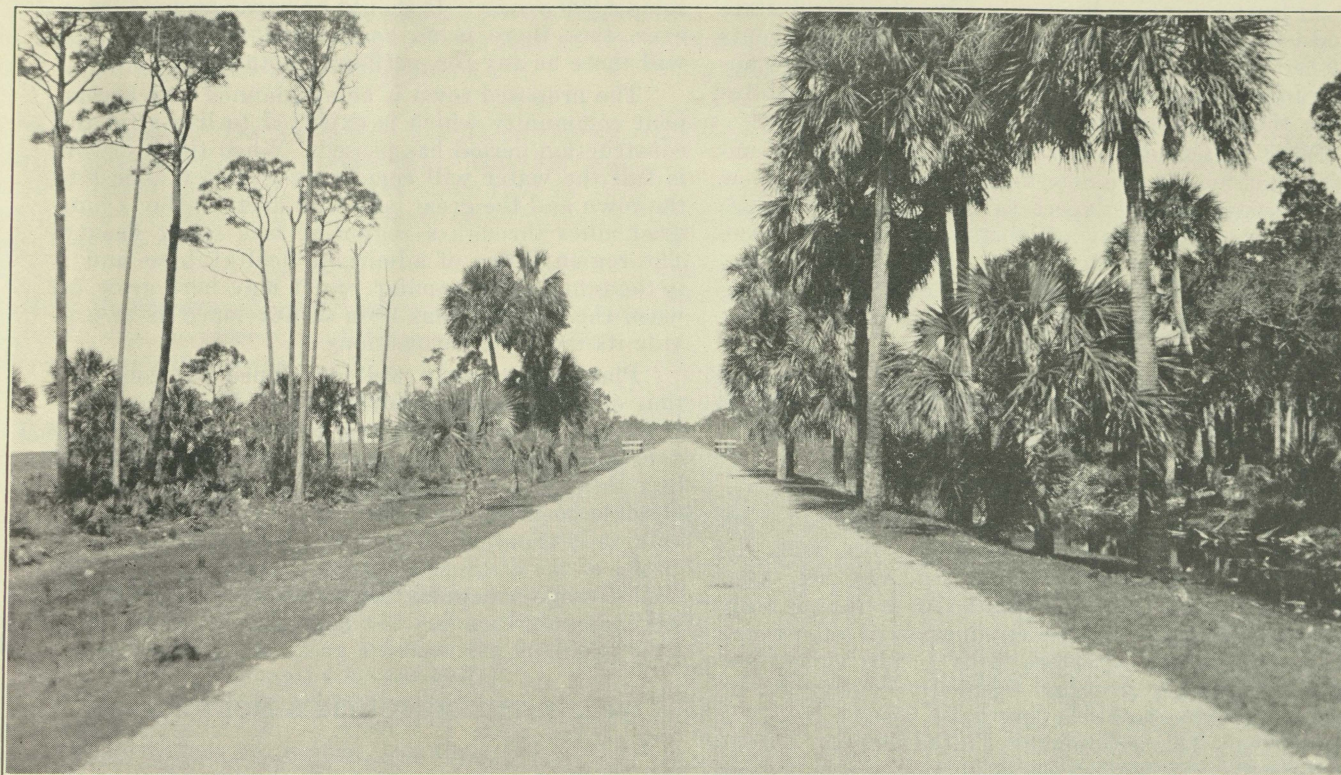
Saginaw county now is to have a real demonstration of highway beautification along the Saginaw-Bay City river road which is nearing completion. Instead of a mere strip of concrete, the road is to be landscaped and its natural beauty preserved. Whatever can will be done toward preventing its defacement with unsightly buildings, particularly hot dog stands and gas stations of the unkempt type so common on other highways.

Other plans discussed by C. F. Boehler, engineer of design and plans of the state highway department, with the local committee, include erection of memorial arches at each end of the new highway and the planting only of native trees and shrubs along its borders. Such a plan, it is pointed out, will require years for consummation, but it is something that can be accomplished a little at a time and altogether worthwhile. And fully as much can be accomplished by preventing defacement and disfiguration, as by active work of beautification.

In this connection it might be remarked that the Standard Oil Company of California is tearing down 1,200 of its roadside advertising signs. Good business and not sentiment led to the company's decision, it announces, and goes on to say:

"To permit the defacement and uglification of these highways is to disgust visitors and drive them away, which most certainly is 'bad business.' Any practice which arouses the contempt, anger or resentment of motorists on the great annual pilgrimage from all parts of the country is detrimental to the state at large. Highway advertising as now practiced in many places has this effect."

A diet expert suggests the juice of an orange and a slice of bran bread in the morning, but doesn't say whether it is to be taken before or after breakfast.
—Fresno Republican.



Project 651, Road 10, Gulf County.

Over 20,000 Miles of Highways to Be Constructed This Year

A CENSUS of state highway departments just completed by the American Road Builders' Association shows an estimated 21,664 miles of structured this year in 42 states.

A questionnaire was sent to all states and figures received from all except Connecticut and Nebraska indicate \$744,266,000 available for maintenance and construction this year. This sum includes highway funds apportioned by the Federal government to the states, and funds raised by gasoline taxes, motor vehicle registrations and various other methods.

The estimated county expenditures for 1929 are shown to be \$405,150,000 in 40 states. This added to the state funds shows a grand total of \$1,249,416,000 which is a conservative figure of the total money that will go into good roads during 1929 or the fiscal year 1929-30. The Bureau of Public Roads estimate is \$1,315,000,000.

In hard surface building Iowa, which now has 1,900 miles, heads the list of states in mileage to be constructed and will pave 750 miles each year in 1929-30-31, making a total of 4,150 miles of paved road.

Kansas has a 1929 construction program with a total of 1,875 miles, which included 800 miles of grading, 1,000 miles sand and gravel and 75 miles hard surface.

New York, with 10,840 miles of all types of road will add 700 miles this year and "700 plus" in 1930.

Ohio, with 6,660 hard surfaced and 3,837 miles of gravel roads will add 300 miles this year.

Pennsylvania, with 7,485 miles hard surfaced in her total mileage of 12,756, will add 500 miles in 1929.

Texas, with 18,000 miles of all types, will add 800 miles this year and "probably the same" in 1930 and 1931.

West Virginia will add 360 miles of hard surface each year over the three-year period. Wyoming will add to her present 39 miles of hard surfaced roads, 390 miles—of all types—in 1929 and 375 miles each in 1930-31.

Michigan, with approximately 3,400 miles of all types, will build 560 miles this year and 500 each in 1930-31, making a total of 5,012 miles.

Alabama expects to build 1,100 miles of road in 1929. Illinois this year will add 600 miles of hard surface to her present 7,525.

Kentucky will hard surface 382 miles of road this year and expects to exceed this program in both 1930 and 1931.

North Dakota, which now has only 15 miles of hard surfaced roads, will build 1,000 miles of all types annually in 1929-30-31.

Missouri will build 1,291 miles, all types, this year and follow next year with 917 miles more, giving that state a total of 2,876 miles hard surfaced.

Mississippi is the only state which has no funds nor estimate for construction this year. The state has matched federal aid with county bond issues in past years but several proposed bills this year have failed, according to the state highway department.

The census further shows that in 22 states all construction is by contract, 23 states employ some day labor, when bids are too high, in emergencies, and on small projects, and convict labor is used on roads in Florida, Michigan and Virginia.

At least six states divide gas tax between the state and counties. Florida giving the counties four cents of her six-cent tax and Mississippi giving the counties three cents out of five. In the others, the states take the larger proportion.

Eight states hope to secure funds for road construction by bond issues in the near future. New Mexico and Maine expect to complete bond issues this year, Mississippi anticipates an issue in 1930, Maryland and Iowa in 1931, the latter for \$100,000,000. Alabama and Georgia are desirous of issuing bonds with the latter state seeking \$100,000,000.—Michigan Roads and Airports.

OUTDOOR ADVERTISING BODY TO AID MOVE TO ELIMINATE OBJECTIONABLE SIGNS

The recent statement issued by the American Automobile Association, with respect to highway advertising, met with an immediate response from the Outdoor Advertising Association of America. That Association has informed the A. A. A. that it fully endorses the stand for the elimination of advertising structures which interfere with scenic views, and that the A. A. A. program harmonizes fully with its own clean-up campaigns that have been in force for three years throughout the United States. Excellent results of periodic clean-up campaigns have been had in Connecticut and Pennsylvania.

The Outdoor Advertising Association has renewed its willingness to work with the A. A. A. and other associations interested, and has pointed out its offer to the Federal Bureau of Public Roads, made three years ago, to secure the elimination of advertising structures which might interfere with the visibility and appearance of Federal or State Highway markers.

The Outdoor Advertising Association now puts forward an additional concrete proposal to beautify that portion of highway advertising which serves an economic function, and to join in a co-operative movement with American business to eliminate as far as possible all business enterprises from sections of scenic beauty. Local application of these principles is now being undertaken in Westchester county, New York.

UNCLE SAM TO BUILD FOUNDATION FOR WESTERN TOURIST RESORT

Uncle Sam is going to build a new town on the brink of the Colorado river, on the Nevada side near the site of Boulder Dam and it is hoped to eventually make it a nationally-famous resort, says the American Automobile Association.

The A. A. A. points out that the primary purpose of the community is to serve workmen engaged in building the dam, but it has been selected with the view to eventually making it a permanent resort, looking out over the largest artificial lake in the world.

The national motoring body says:

"The construction of the great works at Black Canyon will require a period of eight years. Something like a thousand workmen will be constantly employed. With their families and those who are drawn to the dam site by the general activity it is estimated that this town will have a population of

some 4,000 people. It should be borne in mind, however, that there is no employment at present nor will there be any for, perhaps, another year.

"The proposed town is being planned as a permanent community which is expected to live after the construction period has passed. When the reservoir is full the water will come up the valley almost to the town and the great lake will stretch away a hundred miles through a region of rare scenic beauty. The region is one of admirable healthfulness and it is thought that a popular resort may here grow up when the reservoir has been so developed as to provide its incidental attractions.

"Plans are already well developed for construction of automobile highways from Las Vegas, Nevada, and Kingman, Arizona, to the dam. When the dam is completed it will become a bridge as well and link these two roads together. It will then become possible to come past this dam and see the reservoir on a transcontinental trip with little or no increase of the distance traveled. Eventually this will doubtless be a popular tourist route which will develop possibilities for the model town which is to look out upon the world's greatest artificial lake."

WHERE THE MOTORIST'S MONEY GOES

A rise of \$64 since last year in the cost of operating an automobile, according to the president of the American Motorists Association, does not indicate that maintenance and operation costs are necessarily increasing. The difference between the 1927 figure of \$229 and the 1928 figure of \$293—a matter of 28 per cent—is explained, it seems, by the fact that, with better highways available each year, the average motorist uses his automobile proportionately more. At any rate, the Association gives us the figures, and leaves us to extract as much elation as we can from them. Says a New York World item:

"An average of \$293 was spent by each motorist in the United States during 1928 in the operation and maintenance of his car, according to figures compiled by the American Motorists Association. Of this sum \$101, or 34 per cent, was expended for fuel and lubricants, this being the largest item in the motorist's annual operation and maintenance bill.

"The \$293 figure does not take into account depreciation. The average life of a passenger automobile, according to a computation of the Government, is approximately seven years. During 1928 the average retail price of passenger cars in the United States was \$875, which, based on a seven-year life expectancy, would mean an average depreciation of \$125 per year. From this figure, plus the average upkeep cost of \$293, it will be seen that the general average cost of operation, plus depreciation, was \$418 per year, or approximately \$1.14 per day. The comparable figure for 1927 shows that the average cost of operation, plus depreciation, was \$365 for that year, or \$1 per day.

The second largest item on the motorist's maintenance bill is for labor incident to repair work, the motorist expending in 1928 for this item an average of \$82. His replacement parts cost him \$55, while his average tire bill, during the year, was \$34. An average of \$21 was expended for accessories which, with the \$101 spent for gasoline and oil, make up the total of \$293 as the average cost of maintenance for each motor vehicle for 1928.

New York—This year the legislature passed a law by which hereafter the state pays 100 per cent of the cost of both state and county highways.

Massachusetts—The legislature has joined the majority and passed a 2-cent gas tax. This bill was really passed last year, but was submitted to the people on a referendum and became effective January 1 of this year.

New Hampshire—Another bill provided for state assistance in maintenance of classes 1 and 2 highways through the towns.

Indiana—The speed limit on rural highways has been removed, subject to certain regulations, by recent legislation. Drivers' licenses were also made a requirement, effective July 1.

California—Material assistance is assured the 15 more sparsely-settled counties of the state in meeting their road-building problems through the approval by Governor C. C. Young of Assembly Bill No. 1060. This measure, passed by the last legislature, provides for a minimum allotment of \$20,000 of motor vehicle funds to each county before division of this fund on the basis of registration.

Putting His Foot Down

"Does Senator Flubdub ever take a decided stand on anything?"

"Yes, he's in favor of saving the dogwood."—Louisville Courier-Journal.

Live-Stock Note

In Delaware the educational authorities have decided that the girl students must wear stockings to school. It made the children laugh and play to see the calf at school.—Boston Herald.

Knows His Ribs

"Which do you like better, balloon tires or high-pressure tires?"

"I like balloon tires better."

"What kind of a car do you have?"

"I don't have any, I'm a pedestrian."—Grinnell Malteaser.

One reason why so few people can buy what they need is that so many are busy buying what they want.—Virginian-Pilot.

The talking signboard has appeared in America. English motorists are looking forward to the thrill of whizzing through beautiful country lanes lined with pleading, bullying, cajoling and yelling posters.—London Opinion.

Contracts Awarded by State Road Department January 1st, 1929, to September 16th, 1929

Proj.	Road	County	Contractor	Length Miles	Length Feet	Contract + 10%	Type
55	14	Alachua	L. M. Gray	16.77		206,412.32	R. B. S. T.
624	50	Hamilton	Manly Const. Co.	6.23		84,888.18	R. B. S. T.
858	4	Duval	F. S. Whitney	7.00		68,438.10	Mac. Asph.
678	10	Bay	McVay Lindsay & Son	5.00		9,295.00	Hauling
695	2	Lake	Manly Const. Co.	0.40		5,380.54	R. B. S. T.
6	1	Madison	Duval Engr. & Contr. Co.	5.45		91,560.17	R. B. S. T.
669-Y	27	Collier	Kerr and Lawrence	13.55		99,705.56	Grading
854	60	Walton	G. W. Byrd	9.81		85,160.28	Sand Clay
855	60	Walton	C. C. Moore Const. Co.	9.32		90,311.26	Sand Clay
661	2	Lake	Manly Const. Co.	.14		9,313.15	Sheet Asp.
767-688	10	Bay	H. W. Johnson		75	2,567.88	Timber
40-B	4	Brevard	I. B. Purdy			10,565.72	Embankment
806-A	25	Hendry	R. C. Huffman Const. Co.	11.00		32,594.05	C. G. & G.
806-C	25	Hendry	R. B. Stuart	11.00		44,761.37	C. G. & G.
806-D	25	Hendry	R. C. Huffman Const. Co.	12.76		62,950.91	C. G. & G.
62-B	24	Osceola	Florida Bridge & Const. Co.		789	115,447.66	Conc. Bdg.
518	5-A	Lafayette	Broadbent Const. Co.	17.57		244,783.73	R. B. S. T.
587-B	5-A	Columbia	Perkins & Lawson		99	11,405.71	Conc. Bdg.
678	10	Bay	McVay Lindsay & Son	4.00		13,860.00	Hauling
715	28	Union	L. M. Gray	5.26		70,922.96	R. B. S. T.
716	28	Bradford	Duval Engr. & Contr. Co.	11.22		157,799.23	R. B. S. T.
587	5-A	Columbia	Duval Engr. & Contr. Co.	4.43		53,885.30	R. B. S. T.
718	5-A	Columbia	Duval Engr. & Contr. Co.	8.22		101,724.95	R. B. S. T.
815	54	Okaloosa	G. W. Byrd	12.50		27,434.00	Sand Clay
717-706-A	28	Bradford-Clay	Manly Const. Co.	12.06		173,340.83	R. B. S. T.
749-750	14	Gilchrist	L. B. McLeod Const. Co.	8.52		100,722.27	R. B. S. T.
820	96	Jefferson	H. D. Spangler & Co.	9.38		63,008.18	G. & D.
821	96	Jefferson	H. D. Spangler & Co.	5.13		25,478.80	G. & D.
615	5	Sarasota	L. B. McLeod Const. Co.	1.20		20,359.90	R. B. S. T.
	25	Palm Beach	Southern Asph. Const. Co.	4.00		5,575.87	S. T.
64-A	17	Hillsborough	H. E. Wolfe Const. Co.	9.609		257,589.40	Concrete
64-C	17	Hillsborough	H. E. Wolfe Const. Co.	9.61		239,707.82	Concrete
728	10	Leon	Robert G. Lassiter & Co.	11.76		245,718.22	Concrete
65	5	Hillsborough	Fred D. Beasley		423.34	103,856.44	Concrete
742	13	Alachua	L. B. McLeod Const. Co.	7.65		85,343.11	R. B. S. T.
669-Y	27	Collier	Wm. P. McDonald Const. Co.	3.00		48,974.75	R. B. S. T.
695	2	Lake	Manly Const. Co.	6.03		89,689.93	R. B. S. T.
863	56	Columbia	L. M. Gray	1.476		30,078.51	R. B. S. T.
866	17	Hillsborough	Cone Bros. Const. Co.	.50		19,075.00	Asp. Block.
644-C	10	Wakulla	L. B. McLeod Const. Co.	5.05		89,542.16	R. B. S. T.
68-A1	4	Palm Beach	Powell Brothers		199.19	62,038.95	Concrete
68-A1	4	Palm Beach	Nashville Bridge Co.		40.0	27,199.70	Bascule
68-A2	4	Broward	Foley & Milane		46.5	27,703.83	Concrete
68-A3	4	Broward	Foley & Milane		46.5	24,259.40	Concrete
63-B1	4	Palm Beach-Broward	W. S. Lockman Const. Co.		191.12	57,531.88	Concrete
63-B1	4	Palm Beach-Broward	Nashville Bridge Co.		60.0	31,537.00	Bascule
63-B2	4	Broward	Murphy Const. Co.		203.81	50,706.64	Concrete
63-B3	4	Broward	Murphy Const. Co.		134.31	38,027.33	Concrete
721-B	3	Putnam	Austin Bros. Bridge Co.		368.58	120,321.41	Conc. & Steel
835	5	Marion-Citrus	Sahlman & Hogan Const. Co.		264.56	26,850.34	Concrete
Total				266.6	2,840.91	\$3,765,405.70	

Closer Fit

Our gratitude was far from small
As we received the hint;
A journal said it offered all
The news that's fit to print.

And yet times go from bad to worse.
What once was deemed "unfit"
The types in head-lines now rehearse—
It seems to make a hit!

—Washington Star.

Sure-Fire Playfulness

One aspect of the new paper money issue has received too little attention. In your eagerness to acquire the bills, which for a time will be curious as something new, do not forget that in a month the current bills will become curious as something old and rare. Then you will be glad to possess some, will you not?

You do not positively have to turn the old bills in. Keep back a trunk full of \$5, \$10, \$20, and \$1,000 bills. In a few years you can exhibit them to astonish your friends. And your children will appreciate having something unique to play with.—Detroit News.

No mere man can ever understand why a woman will pay five dollars for a pair of stockings that give the impression that she isn't wearing stockings.—Arkansas Gazette.

There is a new danger in aviation nowadays. An aviator coming down on a field after making a new record is liable to collide with others just starting out to break it.—Judge.

All Aboard the Lullaby Limited

Doctor—"I will give you a local anesthetic if you think it necessary."

Railroad Man—"Well, Doc, if it's going to hurt I reckon you had better cut out the local and run me through on a sleeper."—Pennsylvania Farmer.

Ready With an Answer

Pat was hired in a lumber office. The proprietor was a young man and he decided to have some fun with the new hand, so Pat was left in charge of the office, with instructions to take all orders which might come in. Going to a nearby store, the proprietor called up the office:

"Hello! Is this the East Side Lumber Company?"

"Yis, Sorr."

"Send me up one thousand knot holes."

"What's that?"

"One thousand knot holes."

"Well, now, an' ain't that a shame! We are just out of them. Sold them all to the brewery."

"To the brewery? What do they want with them?"

"They use them for bungholes in barrels."

His Level Best

Knight of the Road—"Say, boy, your dog bit me on the ankle."

Boy—"Well, that's as high as he could reach. You wouldn't expect a little pup like that to bite you on the neck, would you?"—Chicago Tribune.

He Was in a Hurry

A "drunk" was passing a subway excavation, stopped for a moment and called down to the men at the bottom of the pit:

"Shay, watcha doin' down there?"

One of the men responded: "We're building a subway."

"How long is it goin' to take to buil' tha' subway?"

"Eight years," came the answer.

"Eight years! (hie) To 'ell with it. I'll take a taxicab."

Alaskan women plan a memorial to the pack mules who lost their lives in the gold rush. Maybe we men will be appreciated yet.—American Lumbermen.

All Settled

Henry Clews once said at a dinner in his sea-fronting chateau on the French Riviera near Cannes:

"The French are a brave people, but the French duel ought to be abolished. It's like the story of Cal Clay and Wash White.

"'You's a liah,' said Cal.

"'Say dat again,' said Wash, 'and I'll bust yore jaw.'

"'Considah it said again.'

"'Considah yore jaw busted.'"

How Times Have Changed

It is said that the word lady originally meant "kneader of bread" or "mistress of the loaf." It now means "needer of automobiles" and her husband has no time for loafing.

Accounting Methods

A wholesaler who had a lot of trouble in getting a certain retail client to pay his bills finally lost patience and wrote the merchant a threatening letter. He received the following reply:

"Dear Sir: What do you mean by sending me a letter like that?

"Every month I place all my bills in a basket and then figure out how much money I have to pay on my accounts. Next, I blindfold my bookkeeper and have her draw as many bills out of the basket as I have money to pay.

"If you don't like my way of doing business I won't even put your bills in the basket."

The Pretty Stenographer

Junior Partner, to pretty stenographer: "Are you doing anything on Sunday evening, Miss Dale?"

Stenographer, hopefully: "No, not a thing."

"Then try to be at the office earlier on Monday morning, will you?"

To My Sweetie at Eventide

Your cheeks are like the roses,

Your neck is like the swan,

Your lips are daubed with lip-stick,

As much as will stay on,

Your smile is bland as it can be,

Your hair is soft and brown,

But if you'll stay away from me,

My supper will stay down.

—Wilburn.

\$6,750 Awarded For Seven Prize Articles

Dealing with all phases of traffic planning and control, which have been published from time to time in regular issues of

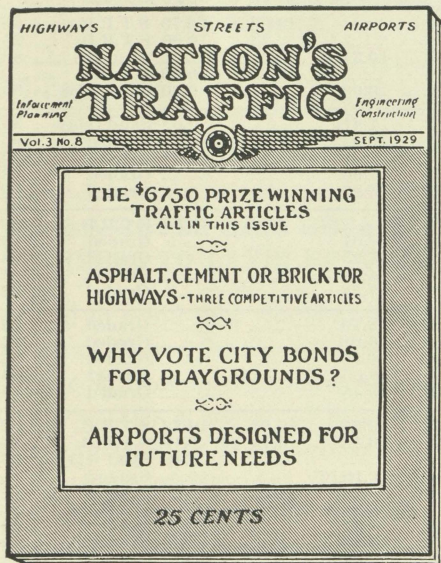
NATION'S TRAFFIC

These articles will be collected and reprinted for permanent reference in the forthcoming September issue of **NATION'S TRAFFIC**.

Highway and Traffic officials, and other public officials will prize this issue highly for reference purposes.

Already more than 3,500 requests have been received for one or more of these articles published in issue of which we no longer are able to supply back copies.

There will be a big demand for copies of this September issue. To be sure of getting yours, send in your subscription now to start with September. Use the coupon.



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Status of Construction

THROUGH JULY 31ST, 1929

Proj. No.	Contractor	Road No.	County	Total Length Miles	Clearing Miles	Grading Miles	Base Miles	Surface Miles	Type	Per cent Complete
6-A	Duval Engr. & Contr. Co.	1	Madison	5.56			5.56	5.56	S.T.R.B.	91.00
52	Robert G. Lassiter & Co.	1	Escambia	10.00				7.70	Concrete	72.00
55	L. M. Gray	14	Alachua	16.44			16.44	16.44	S.T.R.B.	100.00
518	Broadbent Const. Co.	5-A	Lafayette	17.57			6.50	0.00	S.T.R.B.	32.00
587	Duval Engr. & Contr. Co.	5-A	Columbia	4.43			1.90	0.00	S.T.R.B.	38.81
615	L. B. McLeod Const. Co.	5	Sarasota	1.20			1.20	1.20	S.T.R.B.	100.00
624	Manly Const. Co.	50	Hamilton	6.23			6.23	5.23	S.T.R.B.	95.40
669-Y	Kerr & Lawrence	27	Collier	13.55	13.14	10.16			Graded	73.00
672	J. B. McCrary Engr. Corp.	1	Leon	9.90				9.90	Concrete	100.00
673	Robert G. Lassiter & Co.	1	Gadsden	14.97				14.97	Concrete	95.00
678	McVay Lindsay & Son	10	Bay	9.70			9.70	6.79	S.T.R.B.	93.00
685	State Forces	10	Franklin	18.46			18.46	12.48	S.T.R.B.	90.00
706-A	Manly Const. Co.	28	Clay	1.14			1.14	0.00	S.T.R.B.	85.00
707	Leon County Forces	43	Leon	5.31	5.00	4.75			Graded	80.00
715	L. M. Gray	28	Union	5.26			5.27	0.00	S.T.R.B.	76.58
716	Duval Engr. & Contr. Co.	28	Bradford	11.22			8.29	0.00	S.T.R.B.	55.30
717	Manly Const. Co.	28	Bradford	10.93			12.06	0.00	S.T.R.B.	73.00
718	Duval Engr. & Contr. Co.	5-A	Columbia	8.22			5.92	0.00	S.T.R.B.	53.36
722	R. J. Carroll	48	Jefferson	8.83	8.83	8.66			Graded	98.50
724	Leon County	66	Leon	10.67	10.67	10.67		5.50	Sand clay	95.00
728	State Convict Forces	10	Leon	11.65	11.65	11.65			Graded	100.00
732	Gilbert & Haddock	17	Polk	8.94	8.94	8.00			Graded	90.00
733	W. J. Bryson Paving Co.	33	Walton	4.23	4.23	4.02		2.88	Sand clay	89.64
734	Penton-Mathis Const. Co.	40	Walton	7.90	7.90	7.51		7.11	Sand clay	94.09
735	W. J. Bryson Paving Co.	40	Walton	13.72	13.72	13.03		4.80	Sand clay	78.34
743	Baker & Lewis	10	Bay	18.25			12.05	6.75	S.T.R.B.	65.00
749	L. B. McLeod Const. Co.	14	Gilchrist	7.81			2.23	0.00	S.T.R.B.	21.00
750	State Convict Forces	14	Gilchrist	12.97	10.37	10.37			Graded	82.10
750	L. B. McLeod Const. Co.	14	Gilchrist	.71			0.00	0.00	S.T.R.B.	0.00
751	W. J. Bryson Paving Co.	40	Walton	7.28	7.14	6.93		0.00	Sand clay	60.88
752	W. J. Bryson Paving Co.	40	Walton	8.72	8.46	7.41		0.00	Sand clay	59.16
755	B. Booth	17	Polk	11.22	11.22	10.54			Graded	95.00
763	Duval Engr. & Contr. Co.	50	Suwannee	12.34			12.34	12.34	S.T.R.B.	100.00
766	State Convict Forces	10	Bay	8.74	7.43	7.00			Graded	63.00
767	State Convict Forces	10	Bay	5.27	5.27	5.27			Graded	100.00
781	F. W. Long & Co.	29	Okeechobee	11.00			4.00	.50	S.T.R.B.	20.00
787	State Convict Forces	10	Walton	16.29	7.32	4.07			Graded	19.50
788	W. J. Bryson Paving Co.	10	Walton	17.54	7.87	5.25			Graded	23.25
798	State Convict Forces	13	Nassau	15.03	6.50	4.59			Graded	34.00
802-A	C. C. Hayes	10	Okaloosa	8.68	8.25	7.38			Graded	82.00
802-C	Curry & Turner	10	Okaloosa	10.24	9.93	8.19			Graded	76.00
803	Collins Const. Co.	10	Okaloosa	11.13	8.35	6.68			Graded	76.00
806-A	R. C. Huffman Const. Co.	25	Hendry	11.00	11.00	6.82			Graded	75.00
806-C	R. B. Stewart	25	Hendry	11.00	9.35	6.05			Graded	56.80
806-D	R. C. Huffman Const. Co.	25	Hendry	12.76	8.30	3.45			Graded	14.97
807-A	R. C. Huffman Const. Co.	25	Palm Beach	10.82	10.82	10.82	10.82	10.82	S.T.R.B.	99.00
807-C	R. C. Huffman Const. Co.	25	Palm Beach	6.13	6.13	6.13	6.13	6.13	S.T.R.B.	99.00
815	G. W. Byrd	54	Okaloosa	13.58				4.48	Sand clay	33.00
820	H. D. Spangler	96	Jefferson	9.38	5.10	.19			Graded	5.00
821	H. D. Spangler & Co.	96	Jefferson	5.13	1.29	.72			Graded	12.00
840	State Convict Forces	115	Walton	10.45	5.08	4.57			Graded	40.00
842	W. J. Bryson Paving Co.	115	Walton	10.15	7.61	4.06			Graded	40.00
844-A	State Convict Forces	115	Okaloosa	7.10	7.10	6.43			Graded	88.00
844-C	State Convict Forces	115	Escambia	5.63	5.63	4.85			Graded	85.00
845	State Convict Forces	19	Taylor	8.57	6.00	4.75			Graded	45.00
854	G. W. Byrd	60	Walton	9.81	7.90	3.14			Sand clay	27.17
855	C. C. Moore Const. Co.	60	Walton	9.32	8.02	3.73			Sand clay	39.69
Total complete July 31st, 1929					2897.82	2840.61	1456.71	2156.29		
Complete month of July, 1929						17.90	27.69	28.11		34.39
Total complete June 30th, 1929					2879.92	2812.92	1438.60	2121.90		

TOTAL MILEAGE COMPLETE

	Concrete	Brick	B. C.	S. A.	B. M.	Asph. Block	S.T.R.B.	S.T.S.C.	S.C.	Marl	Total
Complete to June 30, 1929	305.59	17.13	39.75	114.75	109.57	23.20	1162.26	226.39	164.46	27.58	2190.68
Complete month of July	4.43						28.76		7.38		40.57
Complete to July 31, 1929	310.02	17.13	39.75	114.75	109.57	23.20	1191.02	226.39	171.84	27.58	2231.25

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HYDE APPROVES BILL DETAILING ENGINEERS TO LATIN REPUBLICS

Approval of a bill that would authorize the President to detail United States engineers to assist Latin American countries in determining their respective highway programs is contained in a letter from Secretary of Agriculture Hyde, given out by Senator Tasker L. Oddie of Nevada. The letter carries an endorsement by the Acting Director of the Budget, reporting that insofar as the financial program of the President is concerned, there is no objection to the proposed report.

The bill was introduced at the special session of Congress by Senator Oddie, recently named by the President as one of the United States delegates to the Second Congress of Highways at Rio de Janeiro, Brazil. Secretary Hyde's letter was referred to Senator Oddie by Senator Lawrence C. Phipps, chairman of the Committee on Post Offices and Post Roads, of which Senator Oddie, who has sponsored many important highway bills, is one of the ranking members.

"It is believed," writes Secretary Hyde, "that timely and valuable assistance may be rendered these countries by the United States, when such assistance is desired, in furnishing advice and assistance to their own engineers and highway officials as to the practical operations involved in properly designing

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highways and bridges and in the handling of materials and equipments for their construction in an economical manner.

"All of the republics to which the bill would apply have engineers that are well trained in the technique of road building, but few of them have had an opportunity to acquire practical experience in carrying on a highway construction and maintenance program of magnitude.

"It is believed that such information could best be made available by the assignment of engineers in accordance with the provisions of the bill, and that the detail of experienced engineers in the manner proposed would serve to stimulate and cement a more friendly relationship and better understanding with our sister American republics."

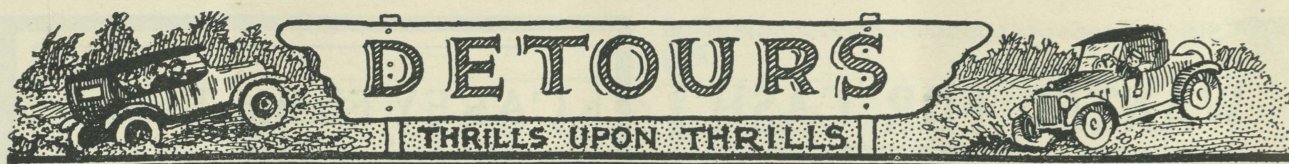
This is the second favorable report of the Department of Agriculture, a bill similar to the present one, introduced in the Seventieth Congress, having the endorsement of Secretary Jardine.

The bill, if approved by the Senate and the House, authorizes the President upon application from the Latin American republics to detail engineers of the Bureau of Public Roads to assist in highway matters.

Back Seat to the Rescue

Husband (in car)—"Great heavens! The engine is terribly overheated."

Wife (calmly)—"Then why don't you turn off the radiator?"—Life.



A Scotchman sent his "fiancee" a package of flower seeds in which he put this note: "Plant these seeds now and you will have a nice bouquet for your birthday."

Pass the Bait

Vicar: "And what parable do you like best, my son?"

Boy: "The one about the multitude that loafs and fishes."—Montreal Star.

Grandma Up-to-Date

Thelma ———, seventy-seven, was struck by an automobile when she roller-skated into the street in front of her home.—Cincinnati paper.

Domestic Economy Triumphant

One argument in favor of bridge is that it has done away with the necessity for an attic to store junk in. We give it all away now as prizes.—Boston Transcript.

Taking His Medicine

Magistrate: "And you were having words with your wife?"

Defendant: "Not with 'er, your honor, from 'er."—Answers (London).

Chatty: "Oh, he's so romantic! When he addresses me he always calls me 'Fair Lady.'"

Catty: "Force of habit, my dear. He's a conductor."—Chicago Tribune.

A watched pot may never boil, but a watched taxi meter goes right on with its work.—Life.

Powerful Motive

It was the young barrister's first case, and he was bubbling over with pride and enthusiasm as he stood in court.

"Now," said he, addressing the defendant, "you say you came to town to look for work? I put it to you there was another, a stronger motive that brought you all this distance."

"Well," hesitated the defendant, "there was—"

"Ah!" cried the barrister, triumphantly. "And what was it?"

"A locomotive."—South Coast Times.

In Adam's Footsteps

Father of six children places blame on wife.—Lansing (Mich.) State Journal.

"Does your fiancee know much about automobiles?"

"Heavens, no! She asked me if I cooled my car by stripping the gears."

It is reported that Harry Lauder, not to be outdone by William Wrigley, Jr., has offered a purse of \$100,000 to the first person who swims the Atlantic Ocean.

Smelt Much Powder

We are not greatly concerned over the fact that American girls in 1927 spent three times as much for cosmetics as Uncle Sam did for his Army. The girls won more battles than the Army did.

—Arkansas City Traveler.

All Agog

"How's the public sentiment out here?" asked the politician who was passing through a rural community.

"Still goin' strong," answered the native. "There was sixteen cars parked in my lane last night."—American Legion Monthly.

Can You Talk About Books with the Rest of Them? Picture yourself in a gathering of "up-to-the-minute" people. Someone mentions Trader Horn or H. L. Mencken. In a twinkling everybody is talking about these much-talked-of writers. What do you do?—Herald Tribune adv. in the Nation.

We steal quietly out of the room and try to get a "bead" on him, through the window.—Kentucky Highways.

Not So Dumb

The dull boy in the class unexpectedly distinguished himself in a recent examination when, in replying to the question, "How and where was slavery introduced into America?" he wrote:

"No women had come over to the early Virginia colony. The planters wanted wives to help with the work. In 1619 the London Company sent over a shipload of girls. The planters gladly married them and slavery was introduced in America."—The Pathfinder.

His Best Alibi

He's rich, but hangs on to his dilapidated auto—he can blame all his delays in reaching home on it.

"Drink," said the Irish preacher, "is the greatest curse of the country. It makes ye quarrel with yer neighbors. It makes ye shoot at yer landlord. And it makes ye miss him."

The Passing Equine

"What's all the crowd so excited about?"

"A horse dropped dead. He saw another horse and was scared to death."

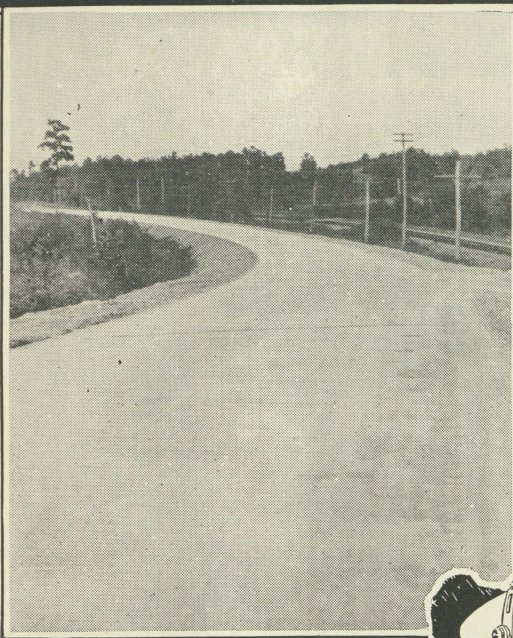
Raising the Ante

The captain of a small trading vessel wanted to land some contraband at a certain port. Approaching the customs officer, he said: "Joe, if I put a ten-shilling note over each eye, could ye see?"

"I could not," said Joe. "And if I had one in me mouth I couldn't speak."—Weekly Scotsman.

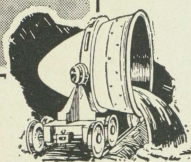
Some of the most attractive beauty spots in the State would never be seen by the traveling motorist, if he didn't have to take an occasional detour.

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With hundreds of miles of road unimproved, little do these taxpayers benefit from the few miles of expensive highway which have eaten up the total local appropriations.

But the tide is turning. "There is a general demand for attention to the secondary systems and farm-to-market roads," declares a recent bulletin of the American Road Builders Association.

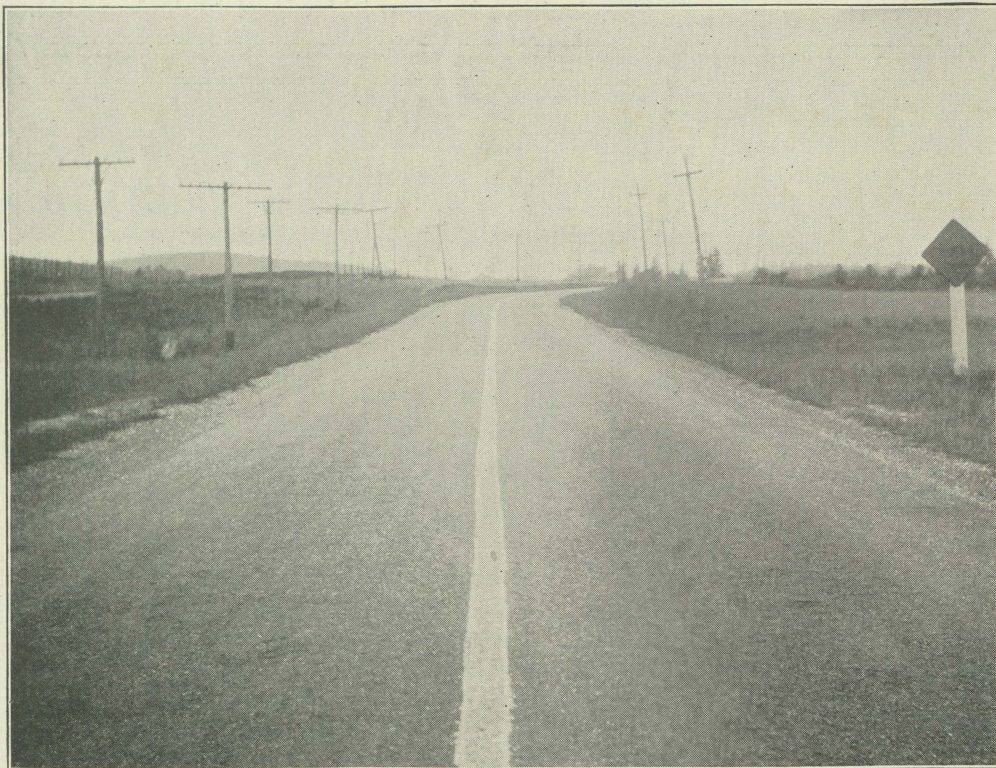
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